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# PEACE HANDBOOKS

VOL. XIII

## PERSIAN GULF: FRENCH AND PORTUGUESE POSSESSIONS

1920



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### Editorial Note.

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IN the spring of 1917 the Foreign Office, in connection with the preparation which they were making for the work of the Peace Conference, established a special section whose duty it should be to provide the British Delegates to the Peace Conference with information in the most convenient form—geographical, economic, historical, social, religious and political—respecting the different countries, districts, islands, &c., with which they might have to deal. In addition, volumes were prepared on certain general subjects, mostly of an historical nature, concerning which it appeared that a special study would be useful.

The historical information was compiled by trained writers on historical subjects, who (in most cases) gave their services without any remuneration. For the geographical sections valuable assistance was given by the Intelligence Division (Naval Staff) of the Admiralty; and for the economic sections, by the War Trade Intelligence Department, which had been established by the Foreign Office. Of the maps accompanying the series, some were prepared by the above-mentioned department of the Admiralty, but the bulk of them were the work of the Geographical Section of the General Staff (Military Intelligence Division) of the War Office.

Now that the Conference has nearly completed its task, the Foreign Office, in response to numerous enquiries and requests, has decided to issue the books for public use, believing that they will be useful to students of history, politics, economics and foreign affairs, to publicists generally and to business men and travellers. It is hardly necessary to say that some of the subjects dealt with in the series have not in fact come under discussion at the Peace Conference; but, as the books treating of them contain valuable information, it has been thought advisable to include them.

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It must be understood that, although the series of volumes was prepared under the authority, and is now issued with the sanction, of the Foreign Office, that Office is not to be regarded as guaranteeing the accuracy of every statement which they contain or as identifying itself with all the opinions expressed in the several volumes; the books were not prepared in the Foreign Office itself, but are in the nature of information provided for the Foreign Office and the British Delegation.

The books are now published, with a few exceptions, substantially as they were issued for the use of the Delegates. No attempt has been made to bring them up to date, for, in the first place, such a process would have entailed a great loss of time and a prohibitive expense; and, in the second, the political and other conditions of a great part of Europe and of the Nearer and Middle East are still unsettled and in such a state of flux that any attempt to describe them would have been incorrect or misleading. The books are therefore to be taken as describing, in general, *ante-bellum* conditions, though in a few cases, where it seemed specially desirable, the account has been brought down to a later date.

G. W. PROTHERO,  
*General Director and formerly*  
*Director of the Historical Section.*

*January 1920.*

*HANDBOOKS PREPARED UNDER THE DIRECTION OF THE  
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## TABLE OF CONTENTS

	PAGE
I. GEOGRAPHY PHYSICAL AND POLITICAL	
(1) Position and Extent ... ..	1
(2) Coasts, Islands, and River Systems ... ..	1
<i>Arabian Coastal Region</i>	
Surface ... ..	4
Coast and Islands ... ..	8
River System ... ..	11
<i>Head of the Gulf</i>	
Surface ... ..	12
Coast and Islands ... ..	13
River System ... ..	15
<i>Persian Littoral</i>	
Surface ... ..	17
Coast ... ..	19
Islands ... ..	24
River System ... ..	25
(3) Climate ... ..	26
Winds ... ..	26
Temperature ... ..	27
Rainfall ... ..	27
(4) Sanitary Conditions... ..	28
ARABIAN COASTAL REGION	
(5) Race and Language... ..	29
(6) Population ... ..	30
Distribution ... ..	30
Movement ... ..	32
HEAD OF THE GULF	
(5) Race and Language ... ..	32
(6) Population ... ..	33



# TABLE OF CONTENTS

[No. 76]

## PERSIAN LITTORAL

	PAGE
(5) Race and Language...	34
(6) Population ...	36

## II. POLITICAL HISTORY

Chronological Summary ...	37
(1) Introduction ...	38
(2) History of the Gulf States to 1914 ...	39
Muscat ...	39
Trucial Oman ...	43
El-Katr ...	45
Bahrein ...	47
Hasa ...	48
Koweit ...	51
Irak... ...	53
South Arabistan ...	54
Persian Coast and Islands...	58
Persian Makran ...	63
(3) European Activity in the Gulf ...	64
Portugal ...	64
Holland ...	64
France ...	65
Russia ...	66
Germany ...	66
Great Britain ...	67

## III. SOCIAL AND POLITICAL CONDITIONS

(1) Religious ...	71
(2) Political ...	71
GENERAL OBSERVATIONS ...	76

## APPENDIX

i. General Treaty of Peace between Great Britain and the Arab Tribes of the Persian Gulf, 1820 ...	78
ii. Treaty of Peace in Perpetuity agreed upon by the Chiefs of the Arabian Coast, 1853 ...	80

AUTHORITIES ...	82
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MAPS ...	83
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## I. GEOGRAPHY PHYSICAL AND POLITICAL

### (1) POSITION AND EXTENT

THE area here described includes the Persian Gulf proper together with the Gulf of Oman and the adjacent coastal regions.

The Persian Gulf and the Gulf of Oman lie between  $22^{\circ} 30'$  and  $30^{\circ} 30'$  north latitude and  $48^{\circ}$  and  $62^{\circ}$  east longitude, and are bounded on the south and south-west by the coastal districts of Arabia, at the head of the Gulf by those of Irak, and on the north-east by the coastal regions of south-west Persia.

The Persian Gulf proper extends in a south-easterly direction for 460 miles from the mouth of the Shatt el-Arab to the coast of the promontory of Oman.<sup>1</sup> Here a projection of the Arabian coast turns north-east as far as Ras Musandim, and narrows the entrance of the gulf through the Straits of Hormuz to a width of 29 miles. The Gulf itself has an average width of about 120 miles.

The Gulf of Oman is an arm of the Indian Ocean or Arabian Sea which forms the approach to the Persian Gulf proper. The outer limit may be taken as a line joining Gwattar in Persian Makran to Ras el-Hadd on the Arabian coast.

### (2) COASTS, ISLANDS, AND RIVER SYSTEMS

The Persian Gulf and the Gulf of Oman occupy the southern part of a great depression lying between the plateau of Arabia and the plateau of Iran, of which

<sup>1</sup> The term "promontory of Oman" is here used to describe that projection of the Arabian coast whose point nearly blocks the entrance of the Persian Gulf, and of which the base is a line running from the town of Abu Dhabi to the Baraimi oasis and thence to the town of Sohar.

Mesopotamia forms the northern part. The Euphrates and Tigris have, within historical times, silted up their mouths to an extent that has materially altered the coast-line of the Gulf, and these rivers seem destined in the future to unite Hasa to Fars, just as in the past they produced the fertile plain of Mesopotamia. The great depression is bounded for about two-thirds of its length, along the Persian littoral and the coast of Oman, by mountain ranges which have in places elevations of as much as 10,000 ft. These ranges run on the Persian side in an extraordinarily uniform direction from north-west to south-east as far as the Straits of Hormuz, where they bear eastwards, thence running along the coast of Baluchistan and Sind. The south-western side of the depression is similarly bounded by the mountains of Oman. In places the mountains run steeply down to the sea, but there is usually a narrow coastal plain or flat tract intervening.

The bottom of the Persian Gulf proper, outside the areas affected by recent coral reefs, is flat and gently undulating, and the depth exceeds 60 fathoms over only a small part of the area. On the Persian side, where the coast is mountainous, the water is naturally deeper than on the flatter Arabian side, where reefs and shoals extend into the Gulf for a distance of from 30 to 50 miles along almost its entire length. The sea-floor of the Gulf of Oman lies very much lower than that of the Persian Gulf proper, this being especially the case in the neighbourhood of the Musandim peninsula, where the depth of the water is about 60 fathoms. About 50 miles from Musandim the depth increases to 150 fathoms.

Of the numerous islands that dot the Gulf, many are partly at least of volcanic origin. The two largest of these are Kishm, which lies off the Persian coast just within the entrance to the Gulf, and Bahrein, off the Arabian coast.

The Persian Gulf is lacking in good harbours, the anchorages being for the most part shallow and exposed.

The coastal regions of the Gulf fall naturally into three groups.

The *Arabian Coastal Region*, which adjoins the south and south-west shores of the Persian Gulf proper, from the Khor Zobeir on the north as far as the entrance at Ras Musandim, and thence along the projecting butt of the Arabian continent as far as Ras el-Hadd, contains a group of sheikhdoms and emirates, the boundaries of which are not usually clearly defined, and includes Koweit, Hasa, El-Katr (Gattar), Trucial Oman, and a considerable part of the Sultanate of Oman, all of which maintain special relations with the British Government (see *Arabia*, No. 61 of this series, p. 22).

At the *Head of the Gulf* proper, the coast of the alluvial plains of Mesopotamia and Arabistan and a part of Behbahan, from the Khor Zobeir in the west to a point near Bandar Dilam in the east, including the districts inland as far as Basra and Ahwaz, comprises Turkish territory, now in British occupation, along the lower Shatt el-Arab, and the Persian province of South Arabistan, which is under the hereditary government of the Sheikh of Mohammera.

The *Persian Littoral*, the narrow coastal plain which lies between the shores of the Gulf and the main maritime range of the mountains, from Bandar Dilam on the north to the frontier of Baluchistan at Gwattar, together with the mountainous interior forming the southern side of the Iranian plateau, comprises the maritime districts of the Persian province of Fars and of Laristan, and includes the administrative districts which are under the governor of the Persian coast and islands, and the coastal district of the province of Persian Makran.

The importance of the Persian Gulf lies principally in its relation to international communications. The head of the Gulf affords the natural outlet to the shortest route from central and southern Europe to India, while at the same time the whole of the Gulf region lies adjacent to the flank of an advance through



Persia in a similar direction. Through the Persian Gulf lie the main trade routes to southern, central, and western Persia from India and from Great Britain, *via* the Gulf ports, Mohammera, Basra, and Baghdad, while with the development of Mesopotamia and the oilfields near the Gulf its importance will be still further increased.

### ARABIAN COASTAL REGION

#### *Surface*

The Arabian coastal region occupies the lowest portion of the long and gradual decline between the central Arabian plateau and the shores of the Persian Gulf, the general slope being broken only by the mountainous district of Oman, which lies in the extreme south-east. The region is bordered on the east by the Dahana, a hard, gravelly plain, crossed at intervals by sand belts of varying width, which runs in a south-easterly direction in a continuous belt and joins east of Oman the enormous block of Arabian desert known as the Ruba el-Khali. For purposes of description the coastal region may be divided into two parts:—

(i) The district in the north-west which extends along the shores of the Gulf proper from Irak in the north to the foot of the promontory of Oman at Abu Dhabi.

(ii) The district in the south-east which includes the promontory of Oman and thence a part of the sultanate as far as the Ras el-Hadd.

(i) This region, which contains the Sultanate of Koweit, the province of Hasa, the promontory of El-Katr, and part of Trucial Oman, is composed of flat or slightly undulating plains, whose surface is broken only by low outcrops of sandstone or occasional isolated hills. In the interior, west of Hasa, there is a certain amount of continuous high ground, stony ridges running parallel to the coast here intervening between Hasa and the desert. With the exception of certain fertile tracts (see below, p. 6), the region consists for the most part of

steppe or desert land, parts of which support a scanty vegetation and yield a certain amount of grazing.

The *Sultanate of Koweit* extends along the coast for 190 miles from the frontier of Irak as far as the boundaries of the province of Hasa; its maximum breadth is about 160 miles, but the effective rule of the Sultan only extends for about a day's journey from the coast. The soil north of Koweit Bay is gravelly, but further south it is partly sand and partly clay, and there is only a small patch of fertile soil. There is no running water in the principality with the exception of one small stream.

Next to Koweit and adjoining its southern frontier, the *Province of Hasa* runs along the coast for 300 miles as far as the promontory of El-Katr, with an average breadth of about 50 miles. With the exception of the two fertile oases of Hasa and Katif, the province is a region of sandy or earthy steppe broken by many low white sandhills. It contains numerous shallow wells of drinkable water, and water is obtainable as a rule a few feet below the surface. There is a fair amount of grazing, and in places much scrub, with occasional depressions in which date palms and various bushes show the presence of water. In the north there are deposits of nitrate and common salt.

The *Promontory of El-Katr* is little known, but it is described as a rocky and pebbly desert, with a poor soil, consisting in the better districts of gravel and marl mixed with sand; the only vegetation is coarse grass mixed with a certain amount of low brushwood, although water is found below the surface without much difficulty.

*Trucial Oman* consists of a group of sultanates which extend along the coast for 300 miles from the foot of the promontory of El-Katr to the Ras el-Jebel district at the north of the Oman promontory. It is a low and sandy maritime plain, unsuited for tillage, but not without natural vegetation and even some wood; inland plains contain tracts with occasional cultivation. There are enough wells and water holes to support a

scanty Beduin population, and certain fertile districts are found in the neighbourhood of springs and wadi mouths.

The principal fertile districts in (i) are :—

(a) A small district of cultivated soil in the neighbourhood of Jahra, close to the foot of the Bay of Koweit and about 20 miles from Koweit town. This contains most of the cultivation in the sultanate.

(b) The two important oases of Hasa and Katif, which form the settled part of the province of Hasa.

The oasis of Hasa is a district which contains some cultivated areas of great fertility. It extends for about 30 miles north and south and 20 miles east and west, and is separated from the Gulf at Okwair by 16 miles of desolate sand ridges. There are extensive date groves in the fertile parts of the district; and in some parts a number of springs saturate the land and permit an elaborate system of irrigation for rice. The important town of Hofuf, capital of the province of Hasa, is situated in this district in the south-eastern corner of the cultivated area.

The Katif oasis is situated on the coast north-east of the oasis of Hasa. Its length from north to south is 18 miles, with an average breadth of 3 miles, the town of Katif lying in the middle. Most of the area consists of a sandy plain saturated by spring water. The cultivated tract ends 6 miles south of the town, but, as in Hasa, there are detached areas of cultivated ground.

(c) The Wadi el-Miya is a long valley or depression in the extreme north of the province of Hasa, containing numerous wells and springs. It has a dark brown cultivable soil, and in spring grass is abundant.

(d) Further south, in Trucial Oman, there are small spots of fertility at occasional wadi mouths.

(ii) The district in the south-east of the Arabian coastal region contains the most important part of the Sultanate of Oman, as well as a part of Trucial Oman,

with independent Oman in the interior. The most important physical feature is the hilly tract which, commencing at Ras Musandim (the entrance of the Persian Gulf proper), sweeps round in a curve parallel to the coast as far as Ras el-Hadd. The range whose northernmost part is the mountainous district of Ras el-Jebel is known as the Hajar of Oman. It is cut into two parts by the great cleft known as the Wadi Semail, and in the lofty Jebel Akhdar reaches heights approaching 10,000 ft. The rocks are mainly of limestone, but around Muscat there is an outcrop of volcanic serpentine which extends for about 10 miles along the coast. Igneous rocks are also found on the coast in the neighbourhood of Sur, and in a few places inland.

Along the Trucial coast of the promontory of Oman there is a wide and sandy maritime plain, but further north, in the Ras el-Jebel district, the mountains fall steeply into the sea. On the eastern side of the promontory the long and narrow coastal plain of Batina intervenes between the mountains and the coast for a distance of 150 miles, but in the neighbourhood of Muscat the coast is again mountainous and steep, and east of this the hilly district of east Hajar comes close to the sea. Inland the Dhahira district extends to the north-west for a distance of about 100 miles. It is a plain of uneven surface which slopes down from the foothills of Hajar to the Ruba el-Khali, in which its drainage is lost. South-east of this, Oman proper consists of a central plateau shut in on the north by Jebel Akhdar and on the south by the desert; its surface, outside the oasis, is rough and broken, and the central portion is a stony plain thickly dotted with small volcanic hills. The district in the south, however, has a wide and level surface sprinkled with dwarf mimosa and bunches of desert grass. Inland, in east Hajar, are sandy plains and a network of small valleys, with occasional patches of cultivation. Fertile districts in this south-eastern coastal region are:—

(a) Parts of the *Batina* coastal plain, which are



very fertile, with many date groves. The Batina plain is crossed by many watercourses, but irrigation is entirely from wells.

(b) South-west of Muscat in the *Wadi Semail* district, where there are a number of date groves.

(c) In addition to these there are many rich tracts in the inland districts which are situated under the main chain of Jebel Akhdar and its coastal continuation towards Ras el-Hadd, also in the Dhahira country.

### *Coast and Islands*

The Arabian coast, with which is included the Trucial and Pirate coasts, and in the Gulf of Oman the Batina coast, runs in a south-easterly direction from the Turkish frontier at the head of the Gulf as far as Ras el-Hadd. The general trend of the land is interrupted by the promontory of El-Katr, which projects northwards from the coast about midway between the head of the Gulf and the Straits of Hormuz, forming the eastern side of the Gulf of Bahrein; and also by the promontory of Oman, where the coast runs north-eastwards from Abu Dhabi to Ras Musandim before turning south-eastwards again to Ras el-Hadd.

(i) The coast-line of the Persian Gulf proper as far as the foot of the promontory of Oman is indented with a number of bays. This part of the coast is low, and reefs and shoals extend from 30 to 50 miles off it, making it difficult and dangerous of approach. Koweit and Bahrein are the only good harbours in this part. The shore is barren and desolate, and a great part of it has the appearance of a desert of white sand with occasional rocky hills of moderate height on which grow tufts of coarse grass. There are date trees near the few towns. The great reef, which commences about 70 miles south of Koweit, extends along the south-eastern and southern shore to the extreme south of the Gulf proper, and forms a labyrinth of reefs and shoals these being especially dangerous in the Gulf of

Bahrein, and between El-Katr and Abu Dhabi. The only island of importance is Bahrein, which forms the centre of the archipelago that constitutes the Principality of Bahrein. The island has an extreme length of 30 miles and a maximum breadth of 10 miles, and consists mainly of a stony plateau from 100 to 150 ft. high. Its coast is low; along the northern shore there is a belt of fertile land from two to three miles wide which is covered with date plantations; the remainder of the island is uncultivated owing to want of water.

*Ports.*—The bay of *Koweit* affords the only good anchorage for large vessels on this coast, with the exception of Bahrein. The bay itself is a large inlet leading out of the north-west corner of the Persian Gulf; it is 20 miles long from east to west, and 10 miles wide; in the greater part of the bay there is anchorage with good holding ground. The depths in the harbour are from 16 fathoms to  $4\frac{1}{2}$  fathoms, shoaling to 4 fathoms in the narrows at its head; vessels drawing over 20 ft. have to anchor two miles from the town. Although Koweit is connected by caravan routes with the interior of Arabia, the principal stream of trade in that direction passes through Manama, the port of Bahrein, whence it flows to minor ports of the Arabian coast, notably Okwair (Ojair) and Katif. From these ports there are caravan routes to Hofuf, the principal town of the Hasa oasis, and thence to Nejd.

*Manama* or *Bahrein* is situated at the extreme north of the island of Bahrein. The harbour is scarcely more than an open roadstead, but is sheltered by the island of Muharrak on the south and east respectively, and by the Fasht el-Yarim to the northward. The latter island does not prevent a considerable sea getting up in the outer harbour during a strong *shamal* (north-west wind), but vessels ride easily at anchor. The inner harbour, which is really a bight in the reefs, is about a square mile in extent; it is chiefly used by *bagala* (dhows), and vessels drawing more than 15 ft. should not enter it. Vessels drawing over 20 ft. lie just over 3 miles from the shore.

The port of *Okwair* (*Ojair*) is situated on the Arabian coast about 24 miles west-south-west of the southern extremity of Bahrein island. The harbour, which seems capable of improvement, has an entrance 200 to 300 yds. wide; the channel and a part of the bay has a depth of 3 to 4 fathoms; the sea without is shallower in places and dangerous for ships.

*El-Katif*, situated in the oasis of Katif, is an important coast town which is 36 miles north-west by west from the nearest part of Bahrein island, and 64 miles north-west of Okwair, and shares with Okwair a considerable part of the trade with the interior of Arabia. It has great defects as a port, and vessels of over 7 ft. draught cannot reach the town. Larger vessels anchor 10 miles north-east of El-Katif, just within Ras Tanura.

The port of *El-Bidaa* (*Bida*), sometimes known as *Doha*, is situated on the eastern side of the promontory of El-Katr, and is connected by caravan route with Hofuf and the interior. There is a natural harbour  $3\frac{1}{2}$  miles long by 2 miles broad, whose approach is obstructed by reefs and shoals. The greater part of the harbour has a depth of  $4\frac{1}{2}$  to 5 fathoms, with anchorage in mud and clay.

(ii) With the exception of the Ras el-Jebel district (see below, p. 11), the coast of the promontory of Oman and of the sultanate as far as Ras el-Hadd has few bays or indentations; a great part of it is mountainous and bold. The coast round Muscat is rugged and steep in places, and east of this the foothills of the mountains run down to the coast. The coast to the south-west of the promontory of Oman, which forms part of Trucial Oman, is a low and sandy desert, while the coast of Batina is also sandy, and is fringed for many miles with date groves. On this part of the Trucial coast the water is shallow though free from reefs, but the coast is open and exposed to the *shamal*, while there is, as a rule, a heavy surf along the coast on both sides of the promontory. There is deep water along the shores of the Gulf of Oman, but

the coast is deficient in good harbours; there are anchorages in the bays of Muscat and Matra, but both are imperfectly sheltered, the former from the north-west, the latter from the north-east winds; there is, however, a good shelter in the Khor Fakan. The importance of Muscat as a distributing centre is affected by the development of Sur, which lies 94 miles south-east of it on the same coast, and of Dibai, on the coast of Trucial Oman. Sur is an important coastal town, second only to Matra on this part of the coast; it has an open anchorage in from 8 to 11 fathoms. Dibai is a small but growing port, which supplies goods to the interior of the Oman promontory and to the Baraimi oasis district; there is anchorage in 5 fathoms, but no shelter from the north-west wind.

The mountainous district of Ras el-Jebel is indented on both sides of the promontory with numerous deep inlets; of these, two, which are known as Malcolm and Elphinstone inlets, form fine natural harbours with 14 to 20 fathoms depth; the winds in these are baffling, and the heat in summer is almost intolerable.

### *River System*

There are no rivers in this or any region of Arabia which flow perennially from source to mouth. There are, however, in Hasa and Oman, as in other parts of the country, watercourses (*wadis*), which carry floods after rainstorms. Those which originate east of the western watershed of Arabia, many of which pass through the region under consideration, are mostly long and shallow, their beds being depressed very little below the general level. These wadis carry water beneath their beds, which can be reached by wells at varying depths; they also provide a possible means of communication, and, where the ground moisture rises near or into their surface, they create chains of oases.

The numerous streams, springs, and ponds which water the oases of Hasa and Katif are said to form a part of the drainage of central Arabia which has passed underneath the Dahana (see p. 4).

## HEAD OF THE GULF

*Surface*

The coastal region at the head of the Persian Gulf lies between the north-eastern corner of the Arabian desert and the south-western edge of the Persian plateau, and consists of the alluvial plains of Turkish Irak and of south Arabistan, although the coast of the former touches the sea on a narrow front only, between the mouth of the Khor Zobeir and the Shatt el-Arab. The district extends along the coast from the Khor Zobeir, which is the boundary between the sultanate of Koweit and Turkish Irak, to a point between the mouth of the Hindian river and Bandar Dilam, a distance of about 130 miles. The plains are featureless, and the surface is broken only in Arabistan, in the east and north of the Hindian district, where there is a considerable hilly tract, and in Ahwaz district, where a range of hills about 30 miles in length rises to a height of 200 ft.; this range is pierced at Ahwaz by the Karun river. With the exception of certain highly cultivated areas enumerated below, the plains are barren or thinly covered with desert scrub; in some parts there are saline tracts, but a considerable part of the plains is in spring covered with grass, and the soil is probably fertile when the water can be brought to it. Large areas of the country are completely covered with swamp, especially in the Felahieh and Hawiza districts of Arabistan and on the Turkish side of the Khor Zobeir.

Fertile areas are:—

(a) The *banks of the Shatt el-Arab*, where between Basra and Mohammera the date groves are practically continuous on both sides of the river, and have a depth inland of from  $\frac{1}{2}$  mile to 2 miles. On the right bank below Mohammera there is generally a fine palm belt.

(b) Considerable tracts of irrigated land in the *Felahieh (Fellahia) and Hawiza districts*, which are watered by the lower courses of the Jarrahi and the Karka rivers,

(c) There is a certain amount of land irrigated by the Hindian river.

The Karun is at present used for irrigation purposes on only a very small scale; belts of tamarisk and willow and other bushes fringe the banks of the rivers, but, as a rule, there are no large trees.

### *Coast and Islands*

The coast of the alluvial plain at the head of the Gulf is low and marshy, liable to flood, and fringed with flat mudbanks, which have been formed by silt brought down by the Shatt el-Arab and other rivers. The head of the Gulf seems to be gradually silting up, and the delta is being extended into the sea more rapidly than any known delta; according to one authority it now advances a mile in seventy years. The shallows and mudflats make the coast difficult of approach. The two large banks, Marakat Abadan and Marakat Abdullah, between which passes the channel to the Shatt el-Arab, may be said to be under-water prolongations of the mainland. The most important indentation on the coast is the entrance to the Shatt el-Arab; but, besides the river mouth, there are numerous deep creeks, of which the most important are the Khor Musa, a large inlet of which the mouth is about 36 miles east of the Shatt el-Arab, and the Khor Zobeir. In the Khor Musa there is a good natural anchorage, but the bar would require dredging to admit vessels of a large size. The Khor Zobeir, which runs up into the desert towards Basra, has fairly deep water, but its approaches make it unsuitable for use as a harbour. With these exceptions there are no natural harbours in this district, although there is an anchorage for small vessels at Bandar Dilam.

Bubian is a large low island about 26 miles in length by 12 in breadth, situated at the north-western corner of the Persian Gulf, which is divided from the mouth of the Shatt el-Arab by the Khor Abdullah, and from the possessions of the Sheikh of Koweit by the Khor as-Sabiya. The island is barren, and is destitute

of fresh water; parts of it are at times submerged by the sea. The other islands at the head of the Gulf are little more than mudbanks, and the strip of land which lies between the Shatt el-Arab and the Haffar and Balmanshir channels of the Karun, which is sometimes called Abadan island, may be considered as part of the mainland.

*Ports.*—The two ports of the district, Basra and Mohammera, are both situated on the Shatt el-Arab.

*Basra* is situated on the right bank of the Shatt el-Arab, 70 miles from the outer bar at the river mouth, and 539 miles by river from Baghdad. It is the chief port of extensive districts of which Baghdad in Mesopotamia and Kirmanshah in Persia are the trade centres, and is also the port of shipment for the date and grain trades of Mesopotamia. There is anchorage in mid-channel in Basra reach for a considerable number of ships in from  $5\frac{1}{2}$  to 8 fathoms. At Margil, 5 miles above Basra, there is a long strip of foreshore with deep water close to the bank, and here some 2 miles of deep-water wharves have been constructed. If improvement to the navigation of the Shatt el-Arab were effected Basra would quickly take its place as a first-rate port, and as the terminus of the Baghdad railway it seems likely to play a most important part in the future economic development of the Persian Gulf region.

*Mohammera* is situated about 16 miles below Basra, close to the junction of the Karun river (through the Haffar channel) with the Shatt el-Arab. Large steamers which cannot swing in the Haffar channel anchor near the left bank of the Shatt el-Arab. The port of Mohammera owes its importance partly to its position at the mouth of the Karun, through which a considerable trade to Persia at present passes, and partly to the fact that the refineries of the Anglo-Persian Oil Company are situated close by. If land transit from Persia *via* Ahwaz to Basra should take the place of river transit, it seems unlikely that the port will develop further to any great extent.

### *River System*

The most important feature of the district at the head of the Persian Gulf is the river *Shatt el-Arab*, which forms a main line of communication along which passes a large section of the trade of Mesopotamia and central and western Persia. The *Shatt el-Arab* is formed by the confluence of the waters of the Tigris and Euphrates, which unite at Kurna, about 125 miles from the bar at the mouth of the river; it is joined at Mohammera, 48 miles from the river mouth, by the greater part of the waters of the Karun. The width of the river at its mouth is  $1\frac{1}{2}$  miles, and the land is very low on both sides of the entrance. Below Mohammera the river is rich in silt contributed largely by the Karun. The waters of the river serve to irrigate through numerous channels and distributaries the extensive date groves which line its banks to a depth of from  $\frac{1}{2}$  mile to 2 miles inland.

The chief obstacle to the navigation of the *Shatt el-Arab* is the outer bar at the mouth of the river, which is formed by flats composed of mud and silt of a width of nearly five miles; a smaller bar forms in the river at certain seasons in the neighbourhood of Mohammera. Above these two bars, however, the river can be ascended as far as Basra by any vessels able to cross the bar, which at spring tides admits ships up to 20 ft. draught, at other times those up to 17 to 18 ft. The *Shatt el-Arab* is wide, with a depth at low-water spring tides of 30 to 40 ft., and there are no very awkward bends in the river, which is navigable as far as Kurna by vessels of 15 ft. draught. In order to give satisfactory access to the port of Basra the bars at the mouth of the *Shatt el-Arab* and below Mohammera should be removed and the channel kept clear; it is said that this work would not present any great engineering difficulties.

The *Tigris* has so far deteriorated through systematic abstraction of its waters for canals and irrigation ditches that its usefulness for purposes of navigation has been seriously impaired; it forms, however, an



important avenue of commerce to Baghdad and thence to Persia. The river between Basra and Baghdad is practicable throughout the year for steamers drawing 4 ft., but there are numerous *bunds* and shoal patches which interfere seriously with navigation when the water is low. The volume of water in the Tigris varies considerably during the year; the low-water season lasts from July to November, the high-water from December to June.

The *Karun* is the largest and only navigable river in Persia; it rises in the mountains in the Bakhtiari country about 100 miles west of Isfahan. After winding through deep valleys and mountain gorges it emerges from the hills above Shustar and then flows south by west; it breaks through the line of sandstone hills at Ahwaz in a series of rapids, and from that point it winds through the alluvial flats of south Arabistan for a further distance of 115 miles. The main volume of the water of the Karun flows through the Hafiar channel into the Shatt el-Arab at Mohammera, the remainder through the Balmanshir channel, reaching the sea about 12 miles east of the mouth of the Shatt el-Arab. The river is navigable as far as Ahwaz by river steamers of 2 ft. draught at any time, and of 5 ft. draught when the river is high. The Karun, which when full carries a brown silt, is not at present much utilised for irrigation purposes. The seasonal variations in the volume of water follow the same general course as those of the Tigris, but the Karun is more subject than the Tigris to sudden irregular rises. The rapids near Ahwaz are practically unnavigable, but above them navigation is again possible to within a few miles of Shustar. The Balmanshir channel can be navigated by vessels of 7 ft. draught up to 30 miles from the sea. It is said that the Karun is not capable of material improvement for navigation purposes except at prohibitive cost.

There are other smaller rivers in this region, and of these the chief are the following:—

The *Jarrahi* rises in the Ramuz district of Arabistan; it flows into the Felahieh district, where it is mostly carried off by canals for irrigation purposes, the lands watered by the Jarrahi being among the most fertile and productive in Arabistan. The remnants of the stream become the Felahieh—Marid canal.

The *Hindian* is formed by the junction of the two streams which rise in the Persian hills between Behbahan and Shiraz. The river reaches the Gulf through mudflats about 30 miles east of the Khor Musa; there is a bar of soft clay at the river mouth. The Hindian in its upper reaches flows through several channels, and is made use of to a considerable extent for irrigation. The depth of water at the bar is not less than 3 ft., and above it 6 ft.; the river can be ascended by native craft as far as the town of Hindian, which is 16 miles north-west of the river mouth.

The *Karka* (Kharkah, Kharkeh) river, which rises in the district north-west of Dizful, enters the plains of Arabistan about 15 miles further west than the Diz river, and waters large areas here and in the Hawiza district. Its waters are dissipated in streams and marshes which have submerged and ruined the district, but a certain amount of the water eventually finds its way through the marshes to the Tigris and the Shatt el-Arab.

## PERSIAN LITTORAL

### *Surface*

The narrow coastal plain of south-western and southern Persia consists of belts of low land of varying width, situated between the sea and a great maritime range of limestone, which forms the southern rim of the Persian plateau. The plain extends along the whole length of the coast from Bandar Dilam to the frontier of Baluchistan at Gwattar, with the exception of that part between Kangun and Asalu, where the maritime range may be said to fall directly into the sea. The

width of the plain varies as a rule from 15 to 30 miles, but in some places, e.g., at Bushire, and again between Bandar Abbas and Minab, the hills retreat, thus widening the maritime plain, which at Bushire attains a width of 45 miles, while further north it reaches a breadth of 60 miles. The surface of the plain is broken by a series of subsidiary coastal ridges and hills, which are from 1,000 to 3,000 ft. high; in places these skirt the coast and give the plain the character of a trough parallel to the sea; in other parts they divide the plain into three parts: inland valley, coastal ridge, and maritime strip; in such cases the inland valley is usually fertile. These coastal ridges contain large quantities of gypsum, and in places, as at Bustaneh and Khamir, there are deposits of sulphur. The soil of the plain is largely a light loam of great fertility, with specially fertile alluvial districts at the foot of the hills, in the deltas of the Rud-Hilleh and the Minab rivers, on which Bushire and Bandar Abbas are respectively situated, and of the Mund river, and also in the tracts along the course of the rivers. Large quantities of cereals are grown, and there is good natural grazing in the hills between May and October. Above the fore-shore there are numerous date groves. Along the coast there are extensive mudflats, and there is a certain amount of saline desert or swamp, bearing only coarse grass and tamarisk bushes. Mangroves are found in the swamps beyond Jask.

In *Persian Makran* the greater part of the coastal plain is a sandy waste impregnated with salt and seamed with lines of drainage, but in places there are patches of alluvial soil; the plain is here wider than on the coast of south-western Persia, and the formation of the coastal ridge and maritime plain less regular.

Adjoining the coastal plain and in places actually abutting on the coast is the south-western portion of the great Persian plateau, the ascent to which from sea-level is almost everywhere accomplished by a series of sudden steps indicated by rugged and precipitous mountain ranges. These ranges, which as a rule run

parallel to the coast, overlook the littoral district in its entire length; they increase in height as they recede inland. The general north-west to south-east trend of the ranges suggests easy communications between the Mesopotamian depression and the interior of the Iranian plateau, but this method of approaching the plateau is, as a matter of fact, extremely difficult. The part of the main range which adjoins the coastal plain rises in places to a height of 5,000 ft.; inside the range and co-extensive with it is a large trough divided into two parts by a watershed. Between the ranges are a series of alluvial plains, in places fertile, which vary in length from 15 to 150 miles and increase in altitude until the central plateau is reached. Further inland, more especially in the province of Fars, the southern slopes of the mountains are generally fertile; they provide very good grazing, or are terraced for vines or other cultivation. In some parts large trees and wild almonds grow above the 3,000 ft. line, and there are forests of dwarf oak. Elsewhere the mountain districts are bare and rocky.

### *Coast*

The coast of the Persian littoral from Bandar Dilam to Gwattar includes the Dashtistan, Tangistan, and Shibkuh coasts in the Gulf proper, the Biaban coast in the Straits of Hormuz, and the coast of Persian Makran. The general trend of the coast is in a southeasterly direction from the head of the Gulf to the Straits of Hormuz, and thence due east along the shore of Persian Makran. It is comparatively free from bays or indentations, and is generally deficient in good harbours, while the seaward face of the various sandstone ridges which occur in the coastal plain is rugged, precipitous, and absolutely barren. There is deep water as a rule fairly close to the shore, which is usually clear of outlying shoals, the only considerable one being the Ras ul-Mutaf, which lies off the Tangistan coast.

The coast-line is either low, rising about 15 ft. above sea-level, or else there are precipitous ranges rising about a mile inland, and occasionally there is much swampy ground.

*Ports.*—There are three principal ports on the Persian littoral from which the caravan routes ascend the plateau and penetrate into the interior, viz., Bushire (leading to Shiraz and Isfahan), Bandar Abbas (for Yezd and Kirman), and Lingeh.<sup>1</sup> All of these are more or less inadequate and ill-protected from prevailing winds. There are also a number of anchorages close in shore which afford shelter to small boats only.

*Bushire*, which may be called the principal seaport of Persia, is situated at the northern point of the Bushire peninsula, about 140 miles south-east of the mouth of the Shatt el-Arab. The peninsula projects from the south into a large bay, the greater part of which is very shallow. The outer anchorage (about  $4\frac{1}{2}$  miles from the shore) is from 4 to  $4\frac{1}{2}$  fathoms deep, and is open and exposed. The inner anchorage, situated in what may be called the entrance of the bay, lies north-north-west of Bushire town, and has good holding ground; it can be entered at any time, except when a *shamal* is blowing, by vessels from 15 to 17 ft. draught. It is said by some that to deepen this approach would be a costly operation, but this is disputed. It is open to question, however, whether Bushire could be converted into a convenient port except at disproportionate cost, and should alternative routes to the interior be developed its importance would be likely to be diminished.

*Bandar Abbas* is situated on the bare and sandy plain which borders on the Straits of Hormuz; the town is fronted by a flat about  $1\frac{1}{2}$  miles broad with less than 3 fathoms of water. There is anchorage in  $4\frac{1}{2}$  fathoms about 3 miles off shore. The chief drawback to Bandar Abbas as a port is the slight slope of the shore, and there is also a lack of facilities for

<sup>1</sup> The natural port of entry for Isfahan is Ahwaz.

handling merchandise. The holding ground, however, is good, and the roadstead, which is well sheltered, except from the south-east, affords anchorage to a fair number of vessels. Bandar Abbas is the natural port of south-eastern Persia, and also provides the outlet for trade routes from the central tract between Herat and Yezd, Meshed, and Bampur, although the last two are also reached from Charbar and Gwattar. From it there are possible routes to the interior which may prove of considerable importance in the future. In the event of improved port facilities being required, it is open to question whether they can be provided at Bandar Abbas, but there are said to be possibilities of a good commercial port at Bustaneh, about 18 miles to the west. The Clarence Straits, which lie to the west of Bandar Abbas, narrow to a width of 3 miles, and contain good anchorage in deep water.

*Lingeh* is situated about 296 miles south-east of Bushire; there is good anchorage in 5 fathoms of water at three-quarters of a mile from the beach, with good holding on a clay bottom; it is exposed, however, to south and south-east winds, which sometimes make communication with the shore impossible. From Lingeh caravan routes run to Bastak, Lar, and Jahrum; but although the roadstead has some advantages over those of Bushire and Bandar Abbas its development is checked by the mountainous and arid nature of the interior. The trade formerly carried on from Lingeh with the Arabian coast, and especially with Trucial Oman, has now been largely diverted to Dibai.

Of the harbours in Persian Makran the most important is *Charbar* (*Chahbar*). The bay of Charbar is  $7\frac{1}{2}$  miles wide at the entrance and 10 miles in length. It has the makings of a deep-water port, but the anchorage is exposed to the monsoon and is dangerous during that season. There is a depth of 4 fathoms at a distance of 1 mile off shore at Charbar town; the 5-fathom line is 2 miles from the beach.

There is an important station of the Indo-European

Telegraph Department at *Jask*; it is situated on a promontory about 140 miles south-east of Bandar Abbas, and about 130 miles north-north-west of Muscat. There are anchorages suitable for steam vessels on both sides of the *Jask* promontory, in which shelter can be found from all but southerly winds. Ships generally anchor  $1\frac{1}{2}$  miles from the shore in the west bay; there is usually a very heavy surf on the beach. The 5-fathom line is nearly 3 miles from the shore in the west bay, and two-thirds of a mile from the shore in the east bay.

*Gwattar* (*Guattar*) bay is a great indentation on the Makran coast, at the meeting-point of Persian and British territory; the width at the entrance is 19 miles, the depth about 11 miles. The whole of the bay is entirely open to the south; a considerable swell runs straight in during the monsoon, and the sea breaks in 6 fathoms, rendering it unsafe to enter. From *Gwattar* there is a caravan route to Bampur, which forms an easy line of approach to the plateau.

The relation between the ports on the Persian coast and their corresponding trade centres on the Persian plateau is closely concerned with the nature of the back-country through which the routes which connect them must pass. The general trend of the mountain chains, which from the Turkish frontier to the Straits of Hormuz run parallel to the coast, from north-west to south-east, makes a direct ascent to the plateau from any point between Bushire and Lingeh very difficult. Between Bushire and Shiraz are four ranges of mountains, and the post road between these points, which constitutes the shortest means of access to the plateau (to Shiraz and thence to Isfahan), is one of the steepest and most arduous routes in Persia. For the first 50 miles the route traverses a level plain which is liable to become heavy or impassable after rain. Between that and Shiraz four difficult passes have to be crossed through rough and rocky defiles; of these the highest is the Kutal-i-pir Zan, which is 7,400 ft. high. The principal alternative route, which is that *via* Firuzabad, crosses a series of passes, of which the

highest is the Muk (6,600 ft.); none of these are as formidable as those on the post road, although the Ahram and other rivers are difficult to cross in times of flood; these, however, occur but seldom. This approach to the plateau, which is to some extent in a transverse direction, is less difficult than the post road, and the same may be said of a possible line of communication between Bushire and Jahrum and thence to Shiraz. Between Shiraz and Isfahan the altitude of the central plateau varies only from 5,000 to 8,000 ft., and there are no difficult obstacles to be surmounted.

Towards Bandar Abbas the valleys between the ranges which form the outer rim of the plateau open out towards the coast, and there is a line of approach to the plateau towards the north-west in a direction parallel to the ranges, from Bandar Abbas to Shiraz *via* Lar and Jahrum. This route, which traverses a succession of fertile plains as well as mountain passes of no great difficulty, is usually made use of as a means of approach to Lar from the coast, in preference to that from Lingeh, which traverses country presenting numerous obstacles in the shape of passes and ravines, and is also deficient in water. The country to the north of Bandar Abbas, through which pass the caravan routes to Kirman and Yezd, comprises a considerable area of the central plateau as well as the ranges which form its outer boundary. The ascent is considerably less arduous than that between Bushire and Shiraz, although the routes are considerably longer. Most of the routes use either the Tang-i-Zagh or Tang-i-Zindan passes, which constitute fairly formidable obstacles, and are situated in the southern part of the routes at a distance of about 80 to 60 miles respectively from Bandar Abbas. Considerable areas of the country are sterile and stony desert, with desolate ranges of hills and numerous ravines; some of the valleys, however, contain fertile soil. There are numerous rivers and fords to be crossed, some of which are at times impassable. The high mountain passes are blocked with



snow in winter, but there is usually an alternative route available. North-east of Bandar 'Abbas there is a depression in the outer rim of the plateau where the boundary range begins to turn east instead of south-east; in this direction is easier country, through which passes the longer route to Kirman by way of Rigan. Only two passes present any difficulty on this route, which provides a fairly easy way for a cart road or railway to the Persian plateau.

The route from Gwattar to Bampur by way of Sarbaz is said by an authority to be the best one from the sea coast on to the plateau. There are no high passes with steep gradients; but, on the contrary, a considerable part of this road runs along stony river beds, and three times a year, when the Sarbaz river is in flood, would be impassable.

### *Islands*

There are several islands strewn along the Persian littoral, usually at a few miles' distance from the coast. Between Bandar Dilam and the outlet through the Straits of Hormuz are the islands of Kharak, Sheikh Shuaib, and Kais, which are all small, low, rocky, and fringed by reefs. Large quantities of valuable building stone are now being transported from Kharak to Basra. Kharak and Kais have both at different times been in British occupation.

The principal island on the Persian littoral, however, is Kishm; this is situated in the Straits of Hormuz, and stretches along the Persian coast from Lingeh almost to Bandar Abbas; it is separated from the mainland by a channel known as Clarence Straits. The island of Kishm is 60 miles long and 90 miles broad, and is nearly covered with precipitous table-topped hills; at one point a low plain extends for several miles across the island. The highest point reaches an elevation of 1,300 ft. The coast is generally rocky. There is an anchorage at the foot of Kishm in 5 fathoms about three-quarters of a mile from the shore; larger vessels anchor 2 miles off in 6 fathoms.

The islands of Henjam and Larak, to the south and east of Kishm, are barren and hilly; they may be regarded as being physically appendages of the larger island. On the island of Henjam there is a British coaling station and also a telegraph station. On the small island of Hormuz, which lies a few miles south-east of Bandar Abbas, was situated the once-celebrated city of Ormuz, which has now disappeared. The island is barren, and contains large quantities of rock-salt and red oxide of iron.

### *River System*

Although the coastal plain is seamed by numerous lines of drainage, rivers in this region are few and unimportant, dwindling at certain seasons of the year to a mere trickle; at other times, especially at the season of the melting of the snows, they increase considerably in volume, and at times become impassable. Many of the rivers and streams are brackish and of no use for irrigation purposes. The river systems which have their origin in the back-country of the Gulf proper run in a north-west and south-east direction, following the natural trend of the mountain districts, and find their way to the coast with difficulty; those of Persian Makran, where the mountain ranges are more interrupted, flow as a rule from north to south into the Arabian Sea.

The only rivers in the district worthy of mention are the Mund, the Rud-Hilleh, and the Minab.

The *Mund*, which rises in the neighbourhood of Shiraz, emerges from the hills in the Dashti district, about 60 miles south of Bushire; at times it is not more than  $3\frac{1}{2}$  ft. deep, but after rain discharges a large volume of water into the sea; the water is brackish. The river is navigable for a short distance by small native craft. The *Rud-Hilleh*, which reaches the sea just north of Bushire, is formed by the junction of two other streams, one sweet and the other brackish, about 30 miles inland. The *Minab*, which enters the Straits of Hormuz a few miles east of Bandar Abbas, has at

Minab town a width of 400 to 600 yds.; it usually carries a fair volume of water. It is one of the few rivers of which the water can be used for irrigation, and in summer is drained almost dry by numerous channels taken off for this purpose.

In Persian Makran there is no river of importance.

### (3) CLIMATE

In the Persian Gulf region weather is a subject of great commercial importance, for, apart from the pearl fisheries, the prosperity of the country depends chiefly on agriculture, which in its turn is to a great extent dependent on rainfall.

The Persian Gulf lies almost outside the region of the south-west monsoon, and its effect on the climate is for the most part indirect. On the Arabian side, within Ras el-Hadd, the monsoon is not felt at all, while on the opposite or Makran coast the monsoon rains do not extend further than Ormara in Baluchistan. The monsoon reaches Jask only in the form of a light south-easterly breeze.

In the Persian Gulf region the summer is very hot and practically rainless; in the winter there is cold and stormy weather with a certain amount of rain. The hot season may be said to extend from the beginning of May to the end of October, and the cold from the middle of November to the middle of March, the remaining periods being transitional. From the middle of May till the middle of July the heat is intense, but is moderated at the upper end of the Gulf by a constantly-blowing *shamal* or north-west wind. From the middle of July to the middle of August the heat is very oppressive owing to the stillness of the atmosphere and the excessive moisture. Bad weather generally begins after the middle of December, and January and February are cold and boisterous.

*Winds.*—The prevailing north-west wind, known as the *shamal*, blows in the northern half of the Persian Gulf for about nine months in the year, being very strong in April and almost incessant in June. In

summer *shamals* are rarely more than moderate; in winter they are often fresh and hard gales. The next most prevalent and distinctive wind is the *kaus* or south-east wind, which in winter alternates with the *shamal*. Other winds are the *nashi*, or north-easter, which blows strongly in the Gulf of Oman, especially in winter; during this period the Batina coast is dangerous. The *suhaili*, or south-west wind, is much dreaded by native mariners, as it strikes nearly all the sheltered anchorages on the Persian coast.

*Temperature.*—The difference in temperature between the northern and southern ends of the Persian Gulf is considerable. At the southern end it never freezes, and snow is not seen except on distant mountains, but in Turkish Irak there are hard frosts at times, and snow has been known to fall at Bushire. The highest absolute temperatures are probably experienced in Irak, but the heat is most felt in the lower part of the Gulf, on account of the humidity; it is, perhaps, more unbearable at Bandar Abbas than elsewhere. Mean daily maximum temperatures in July and August average:—

			July.	August.
Muscat	..	..	92° F. (33° C.)	88° F. (31° C.)
Bahrein	..	..	98° F. (36½° C.)	100° F. (37½° C.)
Bushire	..	..	95° F. (35° C.)	95° F. (35° C.)

Irak is the hottest of the districts and also the coldest; a reading of less than 19° F. (−7° C.) has been obtained at Baghdad.

*Rainfall.*—Rainfall in the Persian Gulf region is extremely light; the following table shows the annual average in inches at the places where observations have been recorded:—

Arabian side.	Head of Gulf.	Persian side.
Bahrein 8½ in. (80 mm.) Muscat 3-6 in. (75-150 mm.)	Baghdad 9 in. (230 mm.) Basra 6 in. (150 mm.) Fao 2-4 in. (50-100 mm.)	Bushire 12 in. (300 mm.) Jask 4½ in. (110 mm.) Charbar 5-6 (130-150 mm.)

Rain is almost confined to the winter months, and hardly ever falls before the middle of October or after the end of May. The principal rainy months are December, January, and February.

The humidity is considerable. At Baghdad, which is a long distance from the Gulf, the average humidity is only 56 per cent., but in Bahrein it is over 79 per cent.

#### (4) SANITARY CONDITIONS

The climate of the Persian Gulf region is, during several months of the year, very trying to Europeans, but it is not altogether unhealthy. The cold weather, though less unpleasant, appears to be more unhealthy than the hot; sickness is most prevalent in the transitional seasons, spring and autumn. Malarial fever is the principal disease of the region, and prickly heat and boils are very prevalent. Plague has shown itself at intervals in the Persian Gulf since 1899, especially in the Gulf ports; but there is little plague in Mesopotamia. Epidemics of cholera are frequent, and at times severe, but they have almost entirely confined themselves to the river towns of the Shatt el-Arab. Small-pox is prevalent in the Persian Gulf region, and at times assumes an active epidemic form.

There was no general organization of quarantine before the war; local systems were under the management of Turkey and Great Britain. Turkish quarantine, which was prescribed by the Constantinople Board of Health, by excessive stringency and constant variation of rules proved a serious impediment to commerce in Irak, while its protective value was slight.

On the Persian coast arrangements as to sanitation were entrusted by the Persian Government to the British authorities in 1897. In 1903 an attempt was made to transfer the control from the British authorities to the Imperial Persian customs; in 1904 the Persian Sanitary Council was founded, but there has

not been much evidence of its activities in the Persian Gulf. The Government of India dispensary was opened at Bandar Abbas in 1906, and has been the means of relieving much suffering.

The chief quarantine officer in the Persian Gulf is the Residency Surgeon at Bushire, an officer of the Indian Medical Service, who represents the Persian Government.

### ARABIAN COASTAL REGION

#### (5) RACE AND LANGUAGE

The population of the Arabian coastal region of the Persian Gulf and Gulf of Oman is almost exclusively Arab, although alien elements occur in many of the coastal towns, especially in Oman.

A large number of the population of the oases of Hasa and Katif and the island of Bahrein belong to a race or class known as Baharina; these may number 100,000. Their origin is doubtful, and they are regarded either as an aboriginal tribe conquered and absorbed by the Arabs, or as a class formed by the conversion of certain Arab tribes to Shiism about 300 years ago. The term as now employed on the west coast of the Persian Gulf is practically a synonym for Arab-speaking Shiah Mohammedans.

The Arabs of Oman belong traditionally to two supposed racial groups: (1) Yamani, said to have been the first Arab settlers in Oman; (2) Nasiri (Nizari), less purely Arab, who were for the most part later immigrants. Each of these groups is divided into a large number of tribes, sections, and sub-sections.

The nomads are exclusively Arab or quasi-Arab. Among the non-Arab elements are included the following elements:—

(i) On the shores of the Gulf proper there are about 1,000 Persians in Koweit, and 2,500 in Abu Dhabi and Dibai. (ii) At Dibai there are about 1,400 Baluchis. (iii) Along the coast of Oman there are colonies of Persians, in part relics of Persian occupation.

(iv) In the neighbourhood of Sohar and elsewhere there are Baluchis and Jadgals, of whom the former, now very numerous, were originally introduced as mercenary troops. There are also considerable Indian communities in Muscat and Matra. (v) Negroes, both emancipated and slaves, are found in considerable numbers in the coastal towns of the Gulf proper, and along the coast of Oman, the outcome of several centuries of slave trade.

Arabic is spoken almost exclusively in this region; but Persian, Hindustani, and Baluchi are also spoken in certain of the coast towns.

## (6) POPULATION

### *Distribution*

Owing to the barren and waterless nature of the region the inhabitants are found mostly in the coastal towns; villages are numerous only where there are oases or springs and cultivation is possible. There are many villages in the oases of Hasa and Katif, in the island of Bahrein, along the Batina coast, in the Wadi Semail, and in the mountains of Oman.

In the larger towns, and especially in Hofuf, where contact with the outside world is maintained through Indian and other merchants, buildings and architecture are more elaborate, and a higher standard of life prevails. Village life is primitive, and the inhabitants of villages are engaged almost exclusively in agriculture.

(i) The total population, settled and nomadic, of the districts adjoining the Gulf proper is said to be in the neighbourhood of 300,000. This is made up as follows:—

—	Settled.	Nomadic.
Koweit .. ..	37,000	13,000
Hasa.. ..	100,000	50,000
El-Katr .. ..	25,000	Unknown
Trucial Oman .. ..	72,000	8,000

The islands of Bahrein have about 100,000 inhabitants. The population of the district as a whole is extremely scanty, and vast tracts are either uninhabited or inhabited only at certain times of the year by a few nomads.

The chief centres of population are:—

(a) Certain *coastal towns and ports* connected with the interior by caravan routes. The great majority of the inhabitants of these towns take part in the pearl fisheries and in the small industries connected with them, such as boat-building, sail-making, &c. There are also considerable sea fisheries, in which some of the pearl fishers take part during the winter.

The numbers of the inhabitants of these towns are as follow:—

Koweit	...	...	...	35,000
El-Katif	...	...	...	5,000
Bida	...	...	...	12,000
Abu Dhabi	...	...	...	6,000
Dibai	...	...	...	20,000
Sharga	...	...	...	15,000
Manama, on the island of Bahrein	...	...	...	25,000
Muharrak, on the island of Bahrein	...	...	...	20,000

(b) The *oases of Hasa and Katif*; these include extensive districts of considerable fertility, and the inhabitants are mainly occupied in agriculture. Hasa oasis has a population of 67,000, of whom 25,000 are included in the capital, Hofuf. The population of Katif oasis is 26,000.

(ii) Of the districts which adjoin the Gulf of Oman, the Sultanate of Oman has about 500,000 inhabitants, of whom 30,000 are nomads, in the interior. Oman proper is said to have a population of 34,300. Beduins are numerous in Oman proper and on the verge of the desert generally, but their numbers cannot be estimated.

The most populous districts of Oman are:—

(a) The *coastal plain of Batina*, which has a settled



population of 105,000, engaged for the most part in agriculture and the cultivation of dates, and in the fisheries.

(b) The *Wadi Semail*, which is a most populous valley with a settled population of 2,800, engaged largely in date cultivation.

(c) The *coastal towns*, of which Muscat has a population of 10,000, and Matra one of 11,000. Matra is the starting-point of a caravan route to the interior, as are also Sur, with a population of 12,000, and Sohar, with 7,500. Kabura has 8,000 inhabitants.

The inhabitants of the coastal towns are engaged in the fisheries and local maritime trade, and also in trade with India and the east coast of Africa.

### *Movement*

Increase and decrease in population are due in the Arabian coastal region chiefly to local causes. In the months between May and September there is a considerable influx of population for the pearl diving, and boats come to this coast from the Persian shore and all parts of the Gulf. In autumn there are local movements of the population for the purposes of the date harvest.

The population also varies according to the movements of the Beduin. These are engaged in the rearing of flocks of sheep and in camel breeding. During the winter and spring they wander far and wide over the plains in search of pasture, but in the hot weather they come in to the wells and oases. They also visit the towns in order to make purchases and to sell live stock and *ghi*.

### HEAD OF THE GULF

#### (5) RACE AND LANGUAGE

The population at the head of the Persian Gulf is principally Arab. In the town of Basra there are, in addition, a few Europeans and Indians, together with about 3,000 Persians and 1,000 Jews.

In *south Arabistan* the population is mostly Arab, with probably in places an admixture of Persian blood. The following non-Arab elements, however, occur:—

(i) In the town of Mohammera there are, besides Arabs,<sup>1</sup> a considerable number of Persians and a few Jews, Sabians, and Oriental Christians. (ii) In Hindian and other districts there are some Persians. (iii) In the eastern part of the country there are a certain number of Lurs. (iv) In Mohammera district there are some negroes and a few Baluchis.

In the province of Behbahan Kuhgiluya the population is Lur; and in Behbahan town and plain there is a population of mixed Persian (or possibly Lur) descent, who are known as Behbahanis.

The language of the region at the head of the Gulf is Arabic, which is spoken in south Arabistan with an admixture of Persian words, while Lur dialects are used in the eastern districts.

## (6) POPULATION

The population of the districts of Irak at the head of the Gulf probably approaches 120,000; of these about 40,000 inhabit the town of Basra, and most of the remainder are found in the numerous villages which are situated in the date groves that line the banks of the river. These are engaged in agriculture, principally date culture. The population in the interior is scanty.

The population of south Arabistan is probably rather over 200,000. The town of Mohammera has about 15,000 inhabitants, Hawiza has 5,000, Felahieh 2,000, and Hindian about 4,000. Large parts of the country are uninhabited or only sparsely populated. The numbers of settled inhabitants and nomads are probably about equal. The former, with the exception of the comparatively small numbers who live in towns,

<sup>1</sup> Arabs in Mohammera town are chiefly local Arabs with some descendants of Arab refugees from Bahrein.

are found in the villages which are numerous in certain parts of the country, e.g., on the left bank of the Shatt el-Arab, on the banks of the Karun in the Mohammera district, and on the Hindian. In the Felahieh district most of the villages are agricultural settlements, situated on canals taken from the Jarrahi river.

The great bulk of the nomads inhabit the districts of Ahwaz and Hawiza; in summer and autumn they camp in the marshes, in winter and spring they roam over the desert with their flocks and herds. A proportion migrate between the Persian and Irak sides of the frontier. The Muhaisin, who are looked upon as a settled tribe, leave Mohammera at certain times of the year in order to cultivate their grain lands on the Karun.

The population of the town of Behbahan is said to be from 12,000 to 15,000.

### *PERSIAN LITTORAL*

#### (5) RACE AND LANGUAGE

The population of the littoral of the Persian Gulf proper from Bandar Dilam to the Straits of Hormuz is composed of a medley of races and racial blends. Among the inhabitants of the coastal region of the Gulf proper the most important elements are Persians and Persian Arabs, the latter of whom may be described as Arabs under Persian rule who have become denationalised by settlement, subjection, or intermarriage; considerable numbers of them now adhere to the Shiah sect of Mohammedans, and they speak as a rule the Persian language. The settled population of the region probably consisted originally of Persians or Persian-speaking tribes, and the numerous Arab settlements seem to have come partly from the mainland, from south Arabistan and the Kaab tribe, partly from the opposite side of the Gulf, from among the Dawasir at Bahrein, and from the Ajman, Al Ali, and

Shammar tribes in the mainland of Arabia. In some parts the two races seem to have blended, in others they are more clearly differentiated, as in the case of Dashistan, where there is an important group of Arab settlements, of which Chakuta is the largest. There are Arab tribes in the Lingeh district and a considerable semi-Arab population in the Shibkuh district.

Besides these races there is in the north a strong Lur element, while in the south-east, in the neighbourhood of Hormuz, a Baluchi strain appears, this being stronger further east, the inhabitants of Biaban being described as all Baluchi.

In Persian Makran there are a number of tribes, mostly claiming to be descended from Arabs, who either originally settled in Makran or moved there later from Sind or Kach. Some of the inhabitants are of Indian origin, and there are many Baluchis. There are also a number of negro slaves.

In the coastal towns the population is also very mixed. The inhabitants of Bushire are principally Persians, but include about 600 Jews and a few Armenians, Goanese, Baghdad Mohammedans, and Europeans. In Bandar Abbas most of the population belong to a hybrid race of mixed Persian, Baluchi, Arab, and negro descent, and are known as Abbasis. There are a number of immigrants, including Persians from Lar, Avaz, and Bastak, also Hindus, Khojahs, and Arabs. Lingeh also has a very composite population, of which the basis is Arab, chiefly immigrants from Trucial Oman and Bahrein. There are some negroes.

Behind the coastal belt the population is extremely scanty. It is composed of tribes of mixed origin, partly settled and partly nomadic, in which Irani, Turki, and, to a small extent, Arab strains are present. Among the chief tribes are the Kashkai, a nomad tribe of Turki origin, a large number of whom descend to the *garmsir*, or warm pastures, from the mountain districts of the Persian plateau for the winter and spring months, and the Mamassani, a group of five tribes of Lur descent.

The Persian language, or a dialect of it, is almost universally spoken in the districts of the Persian coast, both among Persians and Arabs, although a certain amount of Arabic is spoken in places, and in some parts Arabic, Lur, or Baluchi modifications are introduced into the Persian dialect. In Bandar Abbas a dialect known as Abbasi is spoken by a section of the population. In Persian Makran the language of the country is a dialect of Baluchi called Makrani, which contains a number of Persian and Arabic words.

### (6) POPULATION

The number of inhabitants is probably over 300,000; this includes the population of coastal towns, of which Bushire has 12,000–20,000, Lingeh about 12,000, and Bandar Abbas about 8,000. The population of Persian Makran is estimated at about 114,000. Except in the towns mentioned above, the population is scattered in numerous small villages along the sea coast, or in the coastal plain at the foot of the mountains. The inhabitants are engaged principally in agriculture or in seafaring occupations, pearl-diving, sea-fishing, and the local carrying trade. There is a considerable amount of coastal trade between the seaports of the Persian littoral; also between these ports (notably Lingeh) and the Arabian coast, and especially Bahrein and Trucial Oman. Dwellings in the villages are for the most part primitive, and consist largely of huts made of date leaves plastered with mud; in the towns buildings are more substantial, and are made of stone and plaster of Paris, or sun-dried bricks and mud.

## II. POLITICAL HISTORY

### CHRONOLOGICAL SUMMARY

- c. 1602 Portuguese expelled from Bahrein.
- 1622 Expulsion of Portuguese from Hormuz.
- 1652 Expulsion of Portuguese from Muscat.
- 1763 British Residency established at Bushire.
- 1766 Utubi Arabs settled in El-Katr.
- 1783 Conquest of Bahrein by the Utubis.
- 1792 Guadar and Charbar annexed to Oman.
- 1794 Sultan of Muscat obtained control of Bandar Abbas and its dependencies.
- 1795 Wahabi conquest of Hasa.
- 1798 Agreement between Great Britain and Sultan of Muscat.
- 1805 First British expedition against Kawasim.
- 1806 Agreement by Kawasim to respect the flag and property of the British.
- 1809 Second British expedition against Kawasim.
- 1812 Mohammera rebuilt by Muhaisin tribe.
- 1814 Anglo-Persian Treaty.
- 1818 First Egyptian occupation of Hasa.
- 1819 Third British expedition against Kawasim.
- 1820 General Treaty of Peace signed by Arab chiefs.
- 1833 Treaty of Amity and Commerce between the United States and Muscat.
- 1835 First Maritime Truce.
- 1837 Capture of Mohammera by the Turks.
- 1838 Second Egyptian occupation of Hasa.
- 1839 Treaty of Commerce between Great Britain and Muscat.
- 1844 Treaty of Commerce between France and Muscat.
- 1853 Perpetual Treaty of Peace signed by Arab chiefs.
- 1854 Cession of Kuria Muria Islands to Great Britain by Sultan of Muscat.
- 1856-57 Anglo-Persian war.
- 1857 Treaty of Paris between Great Britain and Persia.
- 1861 Convention between Sheikh of Bahrein and Great Britain.  
Award of Lord Canning separating Muscat and Zanzibar.
- 1862 Declaration by Great Britain and France respecting the independence of Muscat and Zanzibar.
- 1868 Agreement between Sheikh of El-Katr and Great Britain.  
Lease of Bandar Abbas to Oman cancelled.  
Anglo-Persian Telegraph Convention.
- 1871 Turkish expedition to Hasa under Midhat Pasha.
- 1872 Charbar captured by Persia.
- 1880 Agreement by Sheikh of Bahrein with Great Britain.
- 1888 Karun opened to foreign shipping and trade.
- 1891 Treaty of Friendship, Commerce, and Navigation between Great Britain and Muscat.

- 1891 Agreement with Great Britain regarding cession of territory by Sultan of Muscat.
- 1892 Exclusive Agreement between Great Britain and Sheikhs of Trucial Oman and Bahrein.
- 1898 Grant by Sultan of Muscat of lease of coaling station to the French.
- 1899 Agreement between Great Britain and Sheikh of Koweit.
- 1900 Question of French coaling station settled.
- 1901 D'Arcy concession for oil exploitation in Arabistan.
- 1903 Baghdad Railway Convention.
- 1905 Muscat Dhows Arbitration.
- 1907 Second Agreement between Great Britain and Sheikh of Koweit.
- 1913 Expulsion of Turks from Hasa by Ibn Saud.  
Convention between Great Britain and Turkey respecting the Persian Gulf and adjacent territories.
- 1914 Treaty between Ibn Saud and Turkish Government.  
Collective assurance from Great Britain to Gulf Chiefs.
- 1915 Treaty between Ibn Saud and Great Britain.
- 1916 Treaty between Sheikh of El-Katr and Great Britain.
- 1919 Anglo-Persian Agreement.

### (1) INTRODUCTION

THE Persian Gulf is from its geographical position one of the highways of the world, an important link in a chain of communication between East and West. For some centuries the Powers that border the Gulf have been incapable of exercising control over its waters; and the region had become a backwater in the stream of civilisation when Great Britain set her hand to the task of establishing peace and security. That it is now possible for all nations to enjoy free access to peaceful markets in this region is due to Great Britain alone; and the *de facto* predominance of this Power in the Gulf has been achieved, as will be shown, by many years of unselfish toil. The historical position of Great Britain in the Gulf has been thus described:—<sup>1</sup>

“ If England has become, in any sense, the arbiter and guardian of the Gulf, it has not been through a

<sup>1</sup> T. J. Bennett, *The Past and Present Connection of England with the Persian Gulf* (Journal of the Society of Arts, June 13, 1902).

restless ambition urging her on to the control of the waste places of the earth, but in obedience to the calls that have been made upon her in the past to enforce peace between warring tribes, to give a free course to trade, to hold back the arm of the marauder and the oppressor, to stand between the slave-dealer and his victim . . . .

“ In the case of England and the Persian Gulf the position is unique; for, although England has at no time enjoyed or even asked for territorial acquisitions in those regions, she has for generations borne burdens there which no other nation has ever undertaken anywhere, except in the capacity of sovereign; she has had duty thrust upon her without dominion; she has kept the peace amongst people who are not her subjects; has patrolled, at intervals, waters over which she has enjoyed no formal lordship; has kept, in strange ports, an open door through which the traders of every nation might have as free access to distant markets as her own.”

## (2) HISTORY OF THE GULF STATES TO 1914

The southern and western littoral of the Persian Gulf is in the occupation of Arab tribes, while the northern and eastern shores are included in the dominions of Persia. To realise the nature of the *status quo*, the maintenance of which has been a cardinal feature of British policy, it is necessary to have an acquaintance with the history of each of the States bordering the Gulf.

*Muscat.*—The greater part of the Sultanate of Oman, the dominion of the Sultan of Muscat, lies to the south of the entrance to the Persian Gulf, but is included in the same political system. The boundaries of the State have never been precisely defined. Great Britain<sup>1</sup> has declared the southern limit on the coast of Arabia to be near Ras Sakar; from this point to Khor Kelbeh the coast-line is continuously under the

<sup>1</sup> British counter-case, presented to The Hague Tribunal in the Muscat Dhows Arbitration in 1905.



sovereignty of the Sultan of Muscat, whose claim to the Musandim peninsula from Ras Dibba to Tibba was also recognised in 1905 by His Majesty's Government. The Sheikh of Sharga rules the coast from Khor Kelbeh to Ras Dibba.<sup>1</sup>

From 1784 to 1856 Muscat and Zanzibar were under the same ruler; after 1794 the Sultan of Muscat governed the islands of Kishm and Hormuz and territory on the Persian coast from Bandar Abbas to Lingeh, but in 1868 his lease was cancelled by the Shah. Guadar,<sup>2</sup> an enclave on the confines of Persia and Baluchistan, has since 1792 been a dependency of Oman, in spite of various attempts at seizure on the part of Persia. Charbar was annexed to Oman in 1792, but was captured by Persia eighty years later.

From A.D. 751 until 1783 Oman was governed by an elective Imam, possessing supreme religious, military, and political authority. After 1783 the ruler of Muscat ceased to be elected, and is styled Seyyid or Sultan more correctly than Imam. Muscat had become finally independent of the Baghdad Caliphate by the tenth century, and from the expulsion (1652) of the Portuguese, who for a short period held the coast, has maintained its position as an independent State, except for an interval of Persian sovereignty (1737-44). The Persians were driven out by Ahmed bin Said (otherwise Sultan bin Ahmed), the founder of the existing Al Bu Said dynasty.

British treaty relations with Muscat date from 1798, when a Deed of Agreement was executed between the East India Company and the Sultan for the exclusion from his territory of the French and Dutch so long as they should be at war with England. This agreement was confirmed in 1800 by a second, which in addition granted permission for an agent of the East India Company to reside permanently at Muscat. Under treaties concluded with Seyyid Said (Said bin Sultan) by France in 1807 and 1808 a French Consular Agent

<sup>1</sup> This was admitted by the French Government in 1905.

<sup>2</sup> Not to be confused with the port of Gwattar.

came to Muscat, until the capture of Mauritius by the British in 1810 destroyed for a time the power and prestige of the French in East African and Arabian waters.

A Treaty of Commerce was concluded between Great Britain and Muscat in 1839, on the model of a similar treaty signed in 1833 between the Sultan and the United States of America. The Sultan entered into various other engagements with the British for the suppression of the slave trade and for the regulation of customs duties; and in 1854 he ceded to the British Government the Kuria Muria Islands, which the French had previously made several efforts to obtain.

On the death of Seyyid Said in 1856 a dispute between two of his sons as to the division of his Arabian and African dominions was submitted to the arbitration of the Viceroy of India, Lord Canning. By his award in 1861 it was decided that Zanzibar should be independent, but should pay an annual subsidy to Muscat. In 1873, in return for agreements concerning the suppression of the slave trade, Great Britain undertook the payment of this subsidy to the Sultan of Muscat "so long as he continued faithfully to fulfil his treaty engagements and manifest his friendship towards the British Government." Payment has been made almost without intermission to the reigning Sultan by the Government of India, without whose recognition no Sultan has since been able effectively to establish his position.

The intervention of the Government of India in the dynastic disputes of the Muscat State, the deportation to India of claimants or pretenders, and the diplomatic and armed assistance lent to the Sultan in various crises, particularly against the Kawasim<sup>1</sup> (Joasmee) and the Wahabis, and for the suppression of piracy in the Gulfs of Oman and Persia, have resulted in the political predominance of Great Britain in the affairs of Muscat. By a Declaration signed at Paris on March 10, 1862, the British and French Governments

<sup>1</sup> See below, p. 44.

bound themselves reciprocally to respect the independence of the Sultan of Muscat. This agreement precluded the establishment of a British protectorate over Oman. In 1891, however, after the signature of a Treaty of Friendship, Commerce, and Navigation between Great Britain and Muscat, the Sultan voluntarily entered into an agreement binding "himself, his heirs and successors, never to cede, to sell, to mortgage or otherwise give for occupation, save to the British Government, the dominions of Muscat and Oman or any of their dependencies." This agreement covers the Musandim peninsula, to which considerable importance is attached on account of its natural harbours and commanding position at the entrance of the Gulf.

In 1894 a French Vice-Consul was appointed at Muscat, and French influence succeeded in 1898 in obtaining from the Sultan a grant for the lease of a coaling station at Bandar Jissa, in his territory. In consequence of the presentation of a British ultimatum the Sultan cancelled this lease; and in 1900 the question of a French coaling station was settled by the French acceptance of the British offer of half of the site already occupied by British coal-sheds in the Makalla cove.<sup>1</sup>

The practice followed by French Consuls at Muscat and elsewhere of granting French ship's papers and flags to Muscat dhows has occasioned much difficulty in the past. Many of these flagholders engaged in the slave and arms traffic; and their claim that the Sultan was not entitled to board or search their vessels or to exercise any jurisdiction over them opposed serious obstacles to the maintenance of law and order. The Sultan appealed for assistance to His Majesty's Government, who on several occasions made representations on the matter to the French Government. A crisis arose in 1903, and the whole question was

<sup>1</sup> In 1916 the French Government agreed to lend these sheds to His Majesty's Government, and they were duly taken over at the beginning of 1917.

submitted in 1905 to the arbitration of The Hague Tribunal. By the award France was permitted to renew licences granted to owners of dhows before January 2, 1892; no licences given since that date were to be valid unless the grantee was a *bonâ fide* French *protégé* before 1863; licences were not to be transmitted or transferred to any other person or vessel. By these enactments the number of French flagholders was greatly reduced, and will soon reach vanishing point.<sup>1</sup>

The reigning Sultan of Oman, Seyyid Taimur bin Feisal, succeeded his father on October 4, 1913, and was recognised by the British and French Governments on November 15 of that year. He had to face a serious rebellion of the tribesmen of the southern interior, who formulated their independence under an elective Imam. Since July 1913 the rebels have been held back from Muscat by a contingent of the Indian Army. The forces of the Sultan are few in number and are not to be depended upon for aggressive action.

*Trucial Oman.*—The region known as Trucial Oman extends from Shuam (Sha'am), just within the entrance to the Persian Gulf, to El-Odeid, on the border of El-Katr; it also includes about 50 miles of territory from Ras Dibba to Kelbeh on the coast-line of the Gulf of Oman. The number of independent rulers within these limits has varied at different times; eight chiefs, excluding the Sheikhs of Bahrein, signed the General Treaty of Peace in 1820, but in 1914 the Sheikhs of Ajman, Abu Dhabi, Dibai, Umm al-Kawein, and Sharga alone were considered independent, although the Sheikh of Ras al-Kheima was only nominally subject to Sharga.

Until the signature by the Sheikhs of the Maritime Truce the region in question was commonly known as the Pirate Coast. The chief power was exercised by the Sheikh of the Kawasim, whose capital at this time was Ras al-Kheima. His subjects succeeded in the

<sup>1</sup> In 1917 only twelve Oman dhows were entitled to fly the French flag.

eighteenth century in establishing themselves on the Persian coast and islands, and his fleet scoured the seas, plundering indiscriminately. The Bombay Government joined the Sultan of Muscat in 1805 in a punitive expedition against the Kawasim, whose chief signed in 1806 an Agreement binding himself and his subjects to respect the flag and property of the British. This treaty appears to have been concluded without reference to the Wahabis, who at this time were said to dominate the eastern coast of Arabia, and to be responsible for the increase of piracy. From 1806-8 there was a temporary cessation of piracy, which may be attributed to the presence of a large British fleet in the Gulf. The spread of Wahabi domination led, however, to a revival of trouble, and strong measures were taken by the British authorities, who stated expressly in 1809 that the Kawasim were to be treated as an independent power.

Effective action was taken by the British against the pirates in 1819, which resulted, in 1820, in the signature of a General Treaty of Peace<sup>1</sup> by eight Sheikhs of the coast. This Treaty, which provided for the cessation of plunder and piracy by land and sea, proved insufficient, since regular maritime warfare was not prohibited, and normally degenerated among the Arabs into indiscriminate piracy. In 1835 the first Maritime Truce was signed; it was constantly renewed and extended until 1853, when it was succeeded by a Perpetual Treaty of Peace,<sup>2</sup> which still prevails. After 1835 the Pirate Coast came to be known as Trucial Oman. Treaties for the suppression of the slave trade were signed by the Maritime Chiefs in 1838, 1839, 1847, 1856, and 1873. In consequence of the Turkish expedition to Hasa under Midhat Pasha in 1871, and of Turkish and other foreign intrigues in Trucial Oman, an Exclusive Agreement was concluded separately by the British Government with each of the Trucial Sheikhs—at this time six in number—in

<sup>1</sup> See Appendix I, p. 78.

<sup>2</sup> See Appendix II, p. 80.

March 1892. By this treaty they bound themselves, their heirs and successors, (1) on no account to enter into any agreement or correspondence with any Power other than the British Government; (2) without the assent of the British Government not to consent to the residence within their territories of the agent of any other Government; (3) on no account to cede, sell, mortgage, or otherwise give for occupation, any part of their territory, save to the British Government. In the following year the Porte was informed of this Agreement; and in 1903 it was made known to the French and Persian Governments. In that year the principle was affirmed that the representation of the Trucial Sheikhs in dealings with other Powers should be undertaken by Great Britain. In 1902 an Agreement was signed by all the Trucial Sheikhs for the suppression of the arms traffic in their territories. At the same time it was reported that new chiefs, on their accession, generally sought British official recognition, and that the advice of the British Resident in the Gulf was obeyed and even welcomed in internal affairs.

Since the suppression of piracy, pearl-diving has been the principal and almost the sole occupation of the maritime population. The increased security in the Gulf, achieved by British efforts, has resulted in a marked development of the pearl industry, and consequent prosperity for the Arabs of the coast.

*El-Katr.*—The El-Katr peninsula lies south of Okwair (Ojair) in the district of El-Katif, and north of El-Odeid, which forms the western limit of the territories of the Trucial Chiefs. It is believed that before A.D. 1766 the peninsula was included in the dominions of the Beni Khalid Sheikhs, whose headquarters were at that time at Hasa. In 1766 the Utubis from Koweit settled at Zabara, from which they conquered Bahrein in 1783. As a dependency of Bahrein, El-Katr became subject to the provisions of the General Treaty of Peace in 1820 and of the Maritime Truce of 1835. The prevalence of piracy, however, occasioned much anxiety to the British authorities in the Gulf, who adopted

strong measures for the maintenance of order and security. Serious disturbances in 1867, following an attack upon El-Katr by the Sheikhs of Bahrein and Abu Dhabi, necessitated British intervention, and on the restoration of peace in 1868 the British Resident concluded an Agreement with the Sheikh of El-Katr binding him never to put to sea with hostile intent, to refer all disputes to the British Resident, and to maintain the relations which had formerly existed with the Sheikhs of Bahrein. The claim of the Sheikh of Bahrein to sovereignty over El-Katr was, however, disallowed by the Government of India. Efforts were made by the Wahabis during the nineteenth century to bring El-Katr under their rule, and the tribute which they exacted from the Sheikh of Bahrein was probably contributed in part by the inhabitants of El-Katr as a security against aggression.

The Turkish expedition to Hasa under Midhat Pasha in 1871 considerably affected the situation in El-Katr. In spite of repeated assurances by the Porte that "not the slightest idea was entertained of making new conquests or subduing independent tribes," a Turkish garrison was established at Doha (El-Bidaa); and in 1874 the Ottoman Ambassador in London put forward a claim to Turkish sovereignty over the whole of Arabia as the inheritance of the Caliphate. The Turkish garrison remained at Doha until 1914, but the Porte was on several occasions informed that Great Britain would not admit Turkish claims to sovereignty over El-Katr.

The advent of the Turks enabled Sheikh Jasim to evade direct responsibility to the British Government for maritime disturbances, and there was a marked increase in piracy. In 1882 Sheikh Jasim declared that the agreement of 1868 with Great Britain was still valid; and more than once subsequently he expressed a desire to enter into the same relations with the British Government as were maintained by the Sheikhs of Trucial Oman. In consequence, however, of his anomalous position in regard to the Turkish Govern-

ment, no action was taken on his requests. In the Convention between Great Britain and Turkey, signed at London on July 29, 1913, the Ottoman Government renounced all their claims to the El-Katr peninsula, and His Majesty's Government declared that they would not permit its annexation or the infringement of its autonomy by the Sheikh of Bahrein (see below, p. 75).

*Bahrein.*—The original inhabitants of Bahrein are held by some authorities to be of Persian and by others of Arab descent. From the eleventh to the sixteenth century they appear to have been subject only to native chiefs. During the sixteenth century the island was held by the Portuguese, who were eventually expelled by the Persians about 1602. Persian domination was maintained, with interruptions, until 1783, when the Utubi Arabs from the mainland conquered the island. In 1800 and 1802 Bahrein was invaded and occupied for a short period by the Sultan of Muscat, by whose aid Wahabi garrisons were expelled in 1811. Since that date the Utubis have remained the chief power in the island, in spite of aggressions by Wahabis, Omanis, Egyptians, and Turks, who have at various times exacted tribute or attempted to assert authority over Bahrein.

The Bombay Government were unable to grant a request made by the Sheikh of Bahrein in 1805 to the British Resident in the Persian Gulf for the assistance of one or two vessels of war. The increase of piracy, however, made the establishment of treaty relations desirable; and in 1820 the Sheikh of Bahrein signed the General Treaty of Peace for the cessation of piracy by land and sea. From this time Great Britain has refused to tolerate the pretensions of other Powers to Bahrein.

British efforts for the establishment of security on the pearl banks have resulted in a series of treaties concluded with various Sheikhs of Bahrein in 1820, 1847, 1856, 1861, 1868, 1880, and 1890. By the Convention of 1861 the Sheikh of Bahrein bound himself to abstain from maritime aggressions of every description,



and from the prosecution of war, piracy, and the slave trade by sea so long as he received the support of the British Government in maintaining the security of his own possessions against similar aggressions. In consequence of Turkish schemes against Bahrein, and of rumours in 1879 that the Turks proposed to establish a coal depot to be converted gradually into a political agency, the British Government in 1880 executed an Agreement with the Sheikh binding him to abstain from entering into negotiations or making treaties with Governments other than the British, and to refuse permission to any other Government than the British to establish diplomatic or consular agencies or coaling depôts in Bahrein territory, unless with the consent of the British Government. In 1892 the Sheikh signed a further Exclusive Agreement identical with that signed by the Trucial Chiefs in the same year.

The capture and destruction by British naval forces of a hostile fleet at Zabara in 1905 saved Bahrein from attack by Arab tribes under Turkish instigation. British influence became increasingly strong, and was directed towards the regulation of the succession to the sheikhship and the improvement of internal administration. In 1905 a British Political Agent was appointed at Bahrein, and has exercised wide judicial powers there. British consular protection has for over fifty years been habitually extended to Bahreinis in foreign countries. The protection of the British Government has converted the island from a scene of chronic external aggression and intestine feud into a relatively peaceful and flourishing centre of industry and commerce.

*Hasa.*—The Sheikhs of the Beni Khalid tribe ruled Hasa until about 1795, when their power was broken by the Wahabi Emir, who used Hasa as a base for the extension of his influence in Arabia. From this time until the arrival of the Turks in 1871 the Wahabis continued to dominate this region, except for two short intervals of Egyptian occupation.

Wahabism dates from about the year 1742, when

Abdul Wahab (or his son) founded the sect which was destined to become the chief power in Central Arabia. The movement was at first purely religious, and took the form of a puritanical Moslem revival. It later acquired a political and military significance not unlike that displayed in the early history of Mohammedan expansion. The first secular chief to adopt Wahabi principles was Mohammed Ibn Saud, Sheikh of Deraya, and ancestor of the present Emir of Nejd. The Wahabis reduced the province of Hasa for the first time in 1792, and conquered it finally in 1795. Five years later they took El-Katif by storm. Meanwhile Wahabi aggressions in Western Arabia and Mesopotamia had aroused considerable alarm, and involved the Emir in hostilities with the Ottoman Government. Hasa was occupied by the Egyptians, under Ibrahim Pasha, in 1818, but was evacuated in the following year. About 1824 the Wahabis again began to assert themselves in this district; and by 1833 the whole Arabian coast of the Gulf of Oman and that of the Persian Gulf, as far north as El-Katif, owned the sovereignty, or at least the suzerainty, of the Emir of Nejd.

The designs of Mehemet Ali, Viceroy of Egypt, embraced Eastern Arabia; and in 1838 the Egyptians for the second time occupied Hasa, in violation of assurances given by Mehemet Ali in that year to the British political representative at Cairo. Egyptian encroachments met with consistent opposition on the part of the British Government, and early in 1840 the Egyptians found themselves obliged to withdraw from Hasa. A pro-Egyptian Emir, who had been appointed Turkish Vali of Central Arabia, was speedily overthrown, and Wahabi influence again predominated.

From the time of the arrival of the Wahabis upon the coast of Arabia their activities became a matter of concern to the British Government. Wahabi influence effected an increase of piracy and maritime disorders; but, by the instructions of the Government of India, the offending tribes were held directly responsible by

the naval authorities in the Gulf, and conflict between the British and the Wahabis was avoided. Friction between the Wahabis and the Sheikhs of Bahrein, and an attempted invasion of the island in 1859 from El-Katif and Damaun necessitated strong British counter-measures. These elicited a protest in the following year from the Turkish governor of Baghdad, on the ground that Damaun formed "part of the hereditary dominions of the Sultan." The British resident, in his reply, denied the claim of Turkey, and asserted the right of Great Britain to deal directly with the Wahabi Emir. After an open breach with the British authorities, a Wahabi envoy, authorised by the Emir, signed on April 21, 1866, a declaration binding the Emir not to oppose or injure British subjects residing in territories under his authority, and not to injure or attack the territories of the Arab tribes in alliance with the British Government.

A conflict between rival candidates for the Emirate was the direct occasion of Midhat Pasha's expedition to Arabia in 1871 and of the Turkish occupation of Hasa. General disorder and piracy resulted, for the suppression of which British intervention was necessary. In consequence of the continued insecurity of the Gulf, the incapacity of the Turkish authorities, and the failure of all efforts to effect an arrangement with the Porte by conciliatory action, Her Majesty's Government decided in 1881 to authorise the commanders of British cruisers in the Gulf to act as might be necessary to prevent or punish disturbance of the peace of the seas.

From 1888 onwards there was intermittent warfare between Ibn Saud, Emir of Nejd, and the Emir of the Jebel Shammar, Ibn Rashid, who was favoured by the Turks. An alliance was formed between the Sheikh of Koweit and Ibn Saud, who in 1902 requested that "the eyes of the benevolent British Government might be fixed on him." His Majesty's Government were, however, reluctant to become involved in the quarrels of the Wahabi Emir, and contented themselves with remon-

strances at Constantinople against the despatch of Turkish assistance to Ibn Rashid. In 1906 peace was declared between the two Emirs, each of whom received at this time a monthly subsidy from the Turkish Government. Renewed overtures were made by Ibn Saud to the British Government, who, however, again declined to interfere in the internal affairs of Arabia.

Meanwhile the condition of Hasa under Turkish rule was one of chronic insecurity. In 1905-6 the Turkish authorities attempted to take a census of the population in the Hasa and Katif oases, apparently with a view to the imposition of a poll tax. Serious riots, however, resulted, and the proceedings were stopped. A recrudescence of piracy interfered seriously with the trade of the Gulf; Turkish co-operation for the punishment of offenders could not be obtained, and continual obstacles were placed in the way of the British authorities. On land robberies were frequent, and communications constantly interrupted. In 1913 Ibn Saud descended on Hasa and expelled the Turkish garrisons from the province. In the Convention signed at London in July of the same year His Majesty's Government recognised Hasa as part of the Ottoman Sanjak of Nejd. Subsequent negotiations between the Turks and Ibn Saud resulted in the signature of a treaty by Ibn Saud and the Vali of Basra, on May 15, 1914. By this treaty Ibn Saud was appointed Turkish Vali of Nejd, and the succession of his descendants was guaranteed on condition of their loyalty to the Ottoman Government; Turkish control over the internal affairs and foreign relations of the vilayet was established; and the Vali was pledged to provide assistance for Turkey in case of internal disturbance or war with a foreign Power. In spite of this treaty, however, Ibn Saud replied to a letter from the Sheikh of Koweit in October 1914, that "in the event of war with Turkey he would stand by the Sheikh and the British Government" (see below, p. 76).

*Koweit.*—The town of Koweit seems to have been founded about the beginning of the eighteenth century

by the Utubi tribe, originating from Central Arabia. It grew rapidly in wealth and importance, and when in 1776 Basra was captured by the Persians, the Indian trade with Baghdad, Aleppo, Smyrna, and Constantinople was diverted to Koweit. In consequence of difficulties with the Turkish officials in 1793, the staff of the British factory at Basra established themselves for over two years at Koweit. In 1805 the Sheikh suggested that the British Government should guarantee him protection against the Wahabis, but his proposals were not entertained. The British Residency at Basra was removed in 1821 to Failaka, in the jurisdiction of the Sheikh of Koweit, again on account of trouble with the Turkish authorities. These circumstances appear to indicate that Koweit was practically independent of Ottoman rule, although in 1829 the Sheikh was said to pay an annual tribute to the Turks. Colonel Pelly, in his report of 1863, stated that the suzerainty of the Porte was merely nominal; and at that time there was no mention of tribute paid to Turkey.

In the latter part of the nineteenth century, however, increased interest was directed by the Porte to the political situation in the Gulf. Koweit assumed a new importance as a possible terminus for the Baghdad Railway, and various attempts were made by Turkey to establish some degree of control over the Sheikh. In 1897 Sheikh Mubarak requested British protection. His overtures were then declined, but subsequent designs on the part of Russia and Turkey made the exclusion of foreign influence from Koweit appear desirable. On January 23, 1899, the Sheikh signed an Agreement with the British Government, binding himself and his successors to cede no territory and to receive no foreign representative without the sanction of the British Government. In return the Sheikh was assured of the good offices of the British Government and received a sum of money. The political situation remained somewhat unsatisfactory until September 1901, when the Porte undertook to maintain the *status quo* at Koweit, and not to send troops

thither, on condition that His Majesty's Government would not occupy that place or establish a British protectorate. The Marquess of Lansdowne gave the required assurance to the Ottoman Ambassador.

On several subsequent occasions, however, British naval and diplomatic support was considered necessary to protect the Sheikh against Turkish designs. In 1902 the Turks established military posts at Umm Kasr and Safwan, and also upon Bubian Island, territories which the Sheikh claimed as lying within his jurisdiction. The Government of India took a serious view of these aggressions; and the importance of asserting the Sheikh's claim to Bubian was emphasised by an Inter-Departmental Committee in 1907. British influence at Koweit was strengthened by the visit of the Viceroy of India in 1903, and the establishment in 1914 of a British Political Agency.

In view of the conflicting territorial claims of the Sheikh and the Turkish Government, and of the prevailing uncertainty as to the exact definition of the *status quo*, it was decided in 1913 to regularise the position. Accordingly articles 1-10 of the Anglo-Turkish Convention of that year, respecting the Persian Gulf and adjacent territories, declared the territory of Koweit, as defined in articles 5 and 7,<sup>1</sup> to form an autonomous Kaza of the Ottoman Empire. Moreover, the Ottoman Government recognised the validity of existing agreements<sup>2</sup> between the British Government and the Sheikh.

*Irak.*—The influence of Turkey in the Persian Gulf did not last long, nor was it ever securely established. The situation in Hasa and Koweit has already been described. Irak. for nearly three centuries formed part of the Ottoman Empire, from which it has now been separated; but before the middle of the nineteenth century the authority of the Porte in the Basra pashalik was seldom more than nominal. After the administrative reforms of Midhat Pasha in 1869,

<sup>1</sup> The islands of Bubian and Warba were included.

<sup>2</sup> Besides that of 1899, there was an Agreement in 1900 prohibiting traffic in arms, and a Postal Agreement in 1904.

the district from the Khor Zobeir to the Shatt el-Arab formed the Kaza of Fao in the Basra sanjak. The Sheikh of Koweit has for many years possessed large private estates in this region, and has been subjected to many annoyances on their account by the Turkish authorities. The Sheikh of Mohammera is also a wealthy landed proprietor; and many of his subjects reside permanently, or for part of the year, on the right bank of the Shatt el-Arab.

Considerable importance has been attached to Fao, both from its commanding position, and, since 1864, as the point of connection between the British submarine cables from India and the Turkish telegraph lines. The construction of fortifications, begun there by the Turks in 1886, was opposed by Her Majesty's Government and by Persia as contrary to the decision arrived at between Turkey and Persia, through the mediation of Great Britain and Russia, previous to the ratification in 1848 of the Treaty of Erzerum. In consequence of remonstrances, the fort was left for some years without artillery, although a Turkish garrison was maintained.

The Shatt el-Arab from the year 1640 marked the boundary between Turkey and Persia. The policing, surveying, charting and buoying of this waterway, as elsewhere in the Gulf, has been for generations performed by Great Britain solely. Basra, which is accessible to ocean-going steamers, is the chief port in the Persian Gulf, and has had for many generations an organic connection with India.

*South Arabistan.*—The whole of the north-eastern littoral of the Persian Gulf, from the Shatt el-Arab, is included in the Persian Empire, but the degree of control exercised by the Shah and his Ministers varies considerably in different districts. South Arabistan, of whose population at least 95 per cent. are Arabs, although nominally a division of the Persian province of Arabistan, is actually under Arab administration, which has consistently resisted attempts on the part of the Persian Central Government to exert control.

The Kaab tribe of Arabs seems to have entered Arabistan at some time in the seventeenth century. Their power increased rapidly, and their Sheikh maintained virtual independence in his relations with both Persians and Turks. The Kaab were notorious pirates, and made frequent depredations on shipping in the Shatt el-Arab and Persian Gulf. Several Anglo-Turkish expeditions were undertaken against them in the eighteenth century, but the results were on the whole unsatisfactory.

In 1812 the town of Mohammera, which appears to have been six centuries ago a port of some renown, was rebuilt by the Sheikh of the Muhaisin tribe, between whom and the Kaab, whose capital was at this time Felahieh, considerable rivalry existed for some years. The chief power in the province belonged at this period to the Sheikh of the Kaab, who shortly after 1832 declared Mohammera a free port. In 1837 the town was seized and plundered by the Turks. They withdrew in the following year, but the rival claims of Turkey and Persia continued to cause disturbances until, by the Treaty of Erzerum in 1847, Mohammera was declared to be within the Persian Empire.

With the possible exception of Russia, Great Britain was the only European Power which at this time exhibited any interest in Arabistan. In 1841-42 the principal rivers were navigated by British agency; and continuous efforts were made to develop British commercial interests in the province. In consequence of pressure from Great Britain, the Karun below Ahwaz was opened in 1889 to foreign shipping and trade; and a service of steamships was instituted and maintained by Messrs. Lynch, in spite of constant obstruction from the Persian authorities. Outbreaks of piracy on the part of the Kaab occurred from time to time, and British efforts to obtain the punishment of the guilty frequently occasioned friction with the Turkish and Persian officials. Vigorous British action succeeded, however, in establishing some measure of security.



During the British occupation of Mohammera (1856-7) the Sheikhs of the Muhaisin and Kaab tribes sought from the British authorities some guarantee of protection, which, however, could not be granted in view of the attitude of Her Majesty's Government towards Persian integrity. It was reported that under the Muhaisin Sheikh Mizal (1881-97) the resources of Mohammera were potentially under British control for the extension of commerce and other purposes. A British Vice-Consulate was established at Mohammera in 1890.

In 1897 Sheikh Mizal Khan was assassinated; he was succeeded by his brother, Sheikh Khazal. Shortly afterwards the Kaab Sheikhdom of Felahieh was abolished, and the tribe passed under the direct rule of the Muhaisin Sheikh of Mohammera. Many of the Kaab Arabs cultivated large territories west of the Shatt el-Arab, though continuing to own allegiance to the Sheikh of Mohammera. The latter thus acquired much influence and wide interests in Turkish Irak, which were frequently a cause of friction between him and the Turkish authorities. Considerable distrust existed between the Sheikh and the Persian Central Government, which made various efforts to undermine his autonomy and semi-independence. In 1898 the Sheikh asked to be taken under British protection. The request was refused, but he was assured of the constant support of the British Minister at Teheran.

Until 1902 the Sheikh of Mohammera had complete control over the customs of Arabistan, but in that year the management was transferred to the Imperial Persian Customs Department, under Belgian administration. The Sheikh evinced great hostility to the transfer, and again asked for British protection, expressing a desire to have his position assimilated to that of the Sheikh of Koweit. In view of Russian designs against Mohammera, His Majesty's Minister at Teheran was authorized to give the Sheikh certain

assurances of British support,<sup>1</sup> which were renewed in 1903. British influence was employed to induce the Sheikh to submit to the customs innovations, and to obtain for him in 1903 the grant from the Persian Government of certain districts "as perpetual property," thus securing his title to the greater part of Southern Arabistan.

Meanwhile commercial development had continued under British auspices. In 1901 a British capitalist, Mr. d'Arcy, obtained from the Persian Government an important concession for oil exploitation in Arabistan. This concession was taken up in 1909 by the Anglo-Persian Oil Company, who made an agreement with the Sheikh in that year, and laid a pipe-line from the oilfields to Mohammera port. They also established a refinery on Abadan Island, in the territory of the Sheikh of Mohammera. Whatever progress was made in land communications in Arabistan was due entirely to British enterprise.

In 1908, and again in 1910, the general assurances already given by His Majesty's Government to the Sheikh of Mohammera were repeated and extended to his successors. The Persian Government were informed in 1910, in answer to an enquiry, that the Sheikh was not "protected" by Great Britain, but that His Majesty's Government had special relations with him, and would support him in the event of any encroachment on his rights. In May 1914 His Majesty's Government acquired a predominant interest in the Anglo-Persian Oil Company. Sheikh Khazal had in the previous December asked for further assurances from Great Britain for the strengthening of his position *vis-à-vis* the Persian Government and the Bakhtiari. The matter was still under discussion at the outbreak of the recent war.

<sup>1</sup> Sir A. Hardinge's letter to the Sheikh, December 7, 1902, contained this statement: "We shall protect Muhamrah against naval attack by a foreign Power, whatever pretext of intervention may be alleged; and also, so long as you remain faithful to the Shah and act in accordance with our advice, we will continue to give you our good offices and support."

*Persian Coast and Islands.*—The Persian littoral consists generally of a narrow strip of flat land, separated from the plateau of the interior by a maritime range running parallel to the coast. This region is ethnically as well as geographically distinct from the rest of Persia, for the coast strip is populated almost entirely by Arabs, and, with the exception of Bushire, there is not a single really Persian town or village from Mohammera to the border of Baluchistan. Maritime power is essential for the control of such a littoral; but the Persians have no liking for the sea, and the Shah has never possessed a navy worthy of the name.

With the aid of the fleet of the East India Company, whose position in Persia was established in 1617, Shah Abbas the Great expelled the Portuguese from Hormuz in 1622, and brought under his rule the coast and islands on the northern side of the Gulf. More than a century later, Nadir Shah entertained the ambition of possessing a navy in the Gulf, but on his death in 1747 the project was abandoned. Karim Khan, however, continued attempting to bring into subjection the Arab sheikhs of the coast, who did not as yet pay tribute to the Persian Government. To this end he offered in 1764 to subsidise one or two British cruisers for permanent police duty in the Gulf. He succeeded in obtaining the assistance of the Sheikh of Bushire, who at this time possessed a considerable fleet.

On the death of Karim Khan in 1779, Persia at once ceased to be the predominant State in the Gulf. In 1794 the Sultan of Muscat obtained the lease of Bandar Abbas and its dependencies, including Shamil, Minab, and the islands of Kishm and Hormuz. Wars with Russia between 1804 and 1828 absorbed the energies of the Persian Government, and the Gulf districts escaped from all control beyond that of their local chiefs. In 1808 the hereditary Arab Sheikh of Bushire was supplanted by a Persian governor, who reported in the following year that, in the event of hostilities between Great Britain and Persia, all the

Arab tribes of the coast south of Kangun would join the British in the hope of shaking off the Persian yoke.

Representatives of the East India Company had settled at Bandar Abbas in 1623-24. A British Residency was established in 1763 at Bushire. The Portuguese finally disappeared from the Gulf about the year 1720, and the Dutch about 1766. Between 1796 and 1809 France despatched several missions to Persia with a view to the conclusion of an offensive and defensive alliance against Great Britain and Russia. A treaty, by which the island of Kharak was ceded to France, was negotiated in 1807, but apparently never ratified by the Shah. The situation had previously aroused the apprehension of the British Government, and treaties of friendship and alliance between Great Britain and Persia were concluded in 1801, 1809, 1812, and 1814. The treaty of 1814 bound the British sovereign not to interfere in any internal dispute in Persia, and to respect the integrity of the Persian kingdom. By the eleventh article the British Government undertook, "if convenient and practicable," to assist the Shah in the Persian Gulf with ships of war and troops.

The British expedition despatched against the Kawasim in 1809 found it necessary to extend operations to the Persian coast, as the pirates had many accomplices and settlements on that side of the Gulf. The Persian Government concurred in the measures adopted, and promised co-operation by land, which was not, however, forthcoming. The British destroyed the port of Lingeh, and visited and searched other places on the coast. On the occasion of Sir W. Grant Keir's expedition, a British garrison was in 1820 placed on the island of Kishm, under a grant from the Sultan of Muscat. The Persian Government protested against the British occupation and assumed full responsibility for the maintenance of order.<sup>1</sup> The

<sup>1</sup> A note addressed to the British Chargé d'Affaires in December 1820 contained this remark: "If any further steps are necessary to check piracy in the Persian Gulf, these can effectually be taken by the Prince of Fars, and no foreign aid is requisite."

Shah undertook to enforce on the Persian coast regulations similar to those imposed upon the Trucial Sheikhs by the treaty of 1820, but the engagement was never fulfilled. In 1822-23 the British garrison was withdrawn from Kishm, but a tract of land granted by the Sultan of Muscat to the British Government at Basidu has since remained a British station, and was until 1879 the headquarters of the Indian Marine in the Gulf.

In 1828 the Sheikh of Bushire secretly applied for British protection, and professed his willingness to enter into any engagements which the British Resident might consider expedient. His application was refused by the Bombay Government as inconsistent with the terms of the Anglo-Persian treaties. Constant friction between the Sheikh and the Persian Government resulted in disorder and unrest on the coast. Arab rule was finally overthrown at Bushire in 1850; and a Persian governor was installed, with the title of Lord High Admiral.

In consequence of Persian operations against Herat in 1837-38, a British expedition to the Persian Gulf was organised and a force maintained on the island of Kharak until the Persian Government had complied with the demands of Great Britain. In 1841 an Anglo-Persian commercial treaty was signed, which contained a most-favoured-nation clause and extended Persian recognition to the British Residency at Bushire. A treaty was concluded between Persia and Oman in 1856 with reference to Bandar Abbas and its dependencies, over which the Sultan of Muscat claimed independent sovereignty. It was now declared that the whole territory formed an integral part of the Persian province of Fars. A fresh lease was granted to Oman in 1868, but was terminated by the Shah in the same year; and the districts reverted to Persian rule.

When war broke out between Great Britain and Persia in 1856 Sir J. Outram was placed in command of the British expeditionary force, which, operating from the Gulf, captured Bushire in 1856 and

Mohammera in 1857. The British troops occupied Kharak from 1856 to 1858. The British Government had expressly stated that Persian subjects were not to be instigated to rebel against the Shah; and these instructions were most faithfully observed. A treaty was signed at Paris between Great Britain and Persia on March 4, 1857, establishing perpetual peace and friendship between the two nations. The British Government, its servants and subjects, were to receive most-favoured-nation treatment in Persia; and, on the ratification of the treaty, Great Britain undertook to withdraw her troops from all Persian territory. An Anglo-Persian Convention signed in 1851,<sup>1</sup> for the restraint of the slave trade, was the only previous agreement between Great Britain and Persia that was renewed by the Treaty of Paris (1857). The British Resident resumed his duties at Bushire on its evacuation by the troops in 1857. The prestige accruing to Great Britain from this campaign was further increased by the construction between 1868 and 1870 of telegraph lines in and across Persia.

After the lapse in 1868 of the lease of Bandar Abbas to the Sultan of Muscat, no Arab principality with any claim to independence existed on the Persian littoral. A degree of autonomy was for a time enjoyed by the Arab Sheikh of Lingeh, and by other petty sheikhs along the coast. The Persian Government, however, were quick to take advantage of local disturbances to secure the expulsion of the Arab rulers. In 1887 the seaboard towns, including Bushire, Lingeh, and Bandar Abbas, with their dependent districts and islands, were formed into a Gulf ports charge, independent of Fars. In the same year the Persian flag was hoisted on the island of Siri and maintained there in spite of a protest from the Sheikh of Sharga, who claimed the island as belonging to the Kawasim. The Persian occupation of Siri has never been recognised by His Majesty's Government.

<sup>1</sup> This treaty, which was for eleven years only, was replaced by a permanent convention in 1882.

The idea of a Persian navy in the Gulf, entertained by Nadir Shah in the eighteenth century, was revived by Nasir-ud-Din Shah. About the year 1865 he had proposed to acquire three or four armed steamers, to be commanded by British naval officers and manned by Arabs or Indians. The scheme was discountenanced by the British Government, who were aware that it concealed aggressive designs upon the islands and pearl fisheries of Bahrein. In 1883, however, the Persian Government gave a contract to a German firm for the construction of two steamers, the "Persepolis" and the "Susa," which arrived in the Gulf in 1885. Neither vessel proved satisfactory; and the policing of the Gulf continued as before to devolve upon Great Britain.

During the reign of Nasir-ud-Din Shah the Persian Government exercised on the northern shore of the Persian Gulf more authority than at any period since the time of Shah Abbas. On the death of Nasir-ud-Din Shah in 1896, however, Persian control of the coast at once declined. No fewer than nine Governors of the Gulf ports succeeded one another in the space of about fifteen months. Arab rule was re-established at Lingeh in 1898; and although the Persians returned in the following year, much unrest prevailed. The inclusion in 1900 of the Gulf districts in the sphere of operations of the Imperial Persian Customs Administration, under Belgian management, aroused much local opposition. The activity of the Belgian officials resulted in the establishment of many new customs posts in the Persian Gulf, and tended towards increased centralisation of authority in the hands of the Persian Government. In 1909 the Nationalists seized the customs and assumed the government at Bandar Abbas, Lingeh, and Bushire; and a British force had to be landed at Bushire to restore tranquillity. The Persian Governor, without troops to enable him to assert his authority or to collect revenue, and harassed by instructions from Ministers at Teheran with no appreciation of the local situa-

tion, was powerless to stem the tide of disorder; and conditions down to 1914 remained most unsatisfactory.

*Persian Makran.*—Persian Makran, although outside the limits of the Persian Gulf, is, like Muscat, within the same political system. It is inhabited chiefly by tribes of Arab or Baluchi descent. Nadir Shah in 1739 attempted to extend his authority to this region, but for a century afterwards no further efforts were made to enforce the Persian claim to sovereignty. At the beginning of the nineteenth century the whole country was divided among local chiefs, who were in every respect independent. With the exception of a short interval in 1804, Charbar remained in the possession of the Sultan of Muscat from 1792 until it was captured by Persia in 1872. The Sultan also held Jask, which was included in 1794 in the lease of Bandar Abbas and its dependencies.

Persian efforts to control Makran were renewed in 1844, when the Governor-General of Kirman occupied Bampur and endeavoured to assert Persian authority east of Jask. The proposal of the Indo-European Telegraph Department in 1861 to lay a line of telegraph from Karachi to Jask afforded the Persian Government an opportunity to advance extravagant claims. Five years later, however, the Persian Vazir of Kirman declared that Persian control on the Makran coast was too slight for him to undertake to protect telegraph construction east of Guadar. The Anglo-Persian Telegraph Convention of 1868 granted an annual subsidy to Persia for operations in places under her sovereignty, but made no territorial definition. The British Government undertook in 1869 to make yearly payments to the principal chiefs of Persian Makran, who pledged themselves to protect the telegraph line. The frontier between Persia and Kelat was fixed by a British Commission in 1872 at a point 8 miles east of Gwattar. A British garrison was maintained at Jask for the protection of the telegraph station from 1878-87, when the district was



included in the jurisdiction of the Governor of the Gulf ports.

On the death of Nasir-ud-Din Shah in 1896 anarchy in Persian Makran reached the pitch of open rebellion against the Persian Central Government. In consequence of the murder of a British telegraph official severe punitive measures were adopted by the Persian authorities, under pressure from Great Britain. Political unrest, however, continued; and in 1898 British garrisons were established at Jask and Charbar. It was reported in 1905 that the Jask district continued to enjoy exemption from payment of any ordinary revenue to the Persian Government. Throughout this period British political interests in Persian Makran were in charge of the Director of Persian Gulf Telegraphs, who was subordinate in political matters to the Resident at Bushire. A blockade of the coast for the suppression of the arms traffic was maintained by the ships of His Majesty's navy from 1910-14. It was reported about this time that the Persian Government had long ceased to exercise any authority in the coast districts of Persian Makran; and anarchy appears to have prevailed down to 1914.

### (3) EUROPEAN ACTIVITY IN THE GULF

*Portugal.*—The first European nation to establish a footing in the Persian Gulf was Portugal, whose influence was felt there for nearly two centuries after her initial occupation of Hormuz in 1508. Portuguese supremacy established by conquest on land and sea during the sixteenth century was challenged and finally overthrown in the seventeenth by the English and the Dutch. After the collapse of their naval power the Portuguese continued to maintain certain commercial interests in Persia and Irak, but their importance diminished, and about 1720 they finally disappeared from the Gulf.

*Holland.*—The Dutch, who co-operated with the English to secure the downfall of the Portuguese,

reaped much of the benefit of English achievements and pioneer work, and became dangerous rivals to the East India Company, both commercially and politically. For some years Dutch influence predominated in the Gulf, but towards the close of the seventeenth century English trade revived and the interests of the Dutch declined. The last of their factories, a fortified settlement on the island of Kharak, was captured by Arabs in 1766; and Dutch activity in this region was brought to an end.

*France.*—French enterprise in the Persian Gulf dates from the formation in 1664 of the French East India Company, which had for a time a factory at Bandar Abbas and later a small trade with Basra. The French position at Muscat rests upon the Franco-Muscat Commercial Treaty of 1844 and the joint Anglo-French Declaration of 1862. The former set up a "most-favoured-nation" relationship between the two States, and gave French subjects the right of complete freedom of trade at Muscat,<sup>1</sup> and permission to purchase, sell, or rent land, houses or warehouses in the dominions of the Sultan. By the Declaration of 1862 Great Britain and France jointly guaranteed the independence of Muscat. As interpreted in connection with the attempt of France to establish in 1896 a coaling station at Bandar Jissa,<sup>2</sup> this treaty precludes the acquisition or lease of territory belonging to Muscat.

From 1891 onwards close relations existed between France and Russia resulting in increased French activity in the Gulf. In 1895 French war vessels began to visit these waters; in the following year the Messageries Maritimes Company instituted a subsidized steamer service between Bombay and the Gulf ports, but the venture failed.

<sup>1</sup> Certain restrictions were placed on trading in ivory and gum copal. In 1914 the French Government renounced the right of invoking privileges conferred by this treaty where they conflicted with local regulations for the control of the arms traffic.

<sup>2</sup> See p. 42.

On the settlement in 1905 of the question of the grant of French flags to Muscat dhows Franco-British relations in the region of the Persian Gulf improved considerably. A certain amount of friction was engendered by the Muscat arms traffic, in which French merchants were actively engaged. The French interest was, however, finally bought out by the Indian Government in 1914 (*cf.* above, p. 42).

*Russia.*—Until comparatively recent years Russian influence and interests in Persia did not extend to the region of the Gulf. In 1881, however, Russia established a consulate at Baghdad, and for some years subsequently engaged in the prosecution of a policy hostile to British interests. Her influence was employed at Teheran to the same end. In 1888 Great Britain was assured of preferential rights in regard to railway construction in Southern Persia; but, by an Agreement with Russia in 1889, the Persian Government engaged that no railway should be constructed in Persia for ten years; the term was afterwards prolonged to 1910. Further evidence of Russian activity included a series of naval demonstrations in the Gulf, the despatch of plague missions to Southern Persia, and the foundation in 1900 of the Russian Steam Navigation and Trading Company, subsidised by the Russian Government to run a steamer service between Odessa and the Persian Gulf, and to establish commercial interests in that region. Persistent endeavours on the part of Russia to obtain a naval base in the Gulf of Persia or Oman at length evoked from Lord Lansdowne in 1903 a statement of British policy, which was reaffirmed by Sir E. Grey in the course of negotiations respecting the Anglo-Russian Convention of 1907. The aversion of the Nationalist party in Persia to foreign control manifested itself in strong public feeling against Russia in the Persian coast districts.

*Germany.*—German interest in the Middle East became prominent in connection with the Baghdad Railway scheme. The Convention of 1903 envisaged an

extension of the railway to a point on the Persian Gulf, where for a few years previously Germany had made organised efforts to achieve political ascendancy by commercial penetration. Her relations with Turkey enabled Germany to place many obstacles in the way of British interests in Mesopotamia and the northern end of the Gulf; her trade increased rapidly; and she made constant efforts to extend her influence in Persia. The visits of German warships to the Gulf began in 1899; and agents of the German firm of Messrs. Wöckhaus established themselves at various points about the same period. In 1906 the Hamburg-America line instituted a service of steamers between Europe and the Persian Gulf, and appointed as their agent the representative of Messrs. Wöckhaus at Bahrein. In the same year this firm entered into a contract with a native concessionnaire for a monopoly of the purchase of oxide of iron from the mines of Abu Musa. When the Sheikh of Sharga cancelled the concession, the German Government approached Great Britain on the matter. The question was still unsettled on the outbreak of war in 1914. German activity in the Persian Gulf, in conjunction with the policy, freely avowed in her press, of regarding the Middle-East as a bridge to world-dominion, made of this region one of the principal theatres of British and German rivalry before the war. In 1913 and 1914 Germany made unprecedented efforts and spared no expense in importing arms and ammunition into the Persian Gulf area.

*Great Britain.*—The political relations of Great Britain with the Persian Gulf date from the expulsion of the Portuguese from Hormuz in 1622, when, under an agreement with Shah Abbas, the Honourable East India Company undertook "to keep two men-of-war constantly to defend the Gulf." British commercial interests had been established in this region some years previously, and during the seventeenth and eighteenth centuries Great Britain extended and consolidated her influence in the face of keen competition from Portu-

guese, Dutch, and French in succession. In the second half of the eighteenth century the commercial ascendancy of Great Britain became unquestioned, and she exercised a widespread political influence in the Gulf. In the early nineteenth century three expeditions were despatched from Bombay for the suppression of piracy and lawlessness on the part of the Arab tribes; additional responsibility was assumed as the situation demanded, and as the inability of any local authority to exercise control became increasingly apparent. The treaty relations entered into by Great Britain with the Arab States of the littoral have been dealt with above. By these treaties the British Resident at Bushire became the arbiter of all disputes among the Sheikhs. An enormous advance in general security and prosperity has been effected in the Gulf by the *Pax Britannica*, maintained with rare exceptions from that time.

At the beginning of the nineteenth century there was no legal obstacle to the slave trade in any part of the Persian Gulf, and it was carried on extensively. In defiance of her commercial interests and her popularity with the Moslem population of the Gulf, Great Britain set herself to suppress the trade. Beginning with the General Treaty of 1820, and a treaty with the Sultan of Muscat two years later, a series of agreements was concluded with Muscat, Trucial Oman, Bahrein, El-Katr, Hasa, Koweit and the Turkish and Persian Governments in restraint of the traffic. The arduous task of enforcing the observance of these treaties fell upon the Indian Government, and involved great sacrifice of lives and money.

Great Britain alone has been responsible for the work of policing, surveying, charting, lighting, and buoying the Persian Gulf. Since at least 1864 she has undertaken sanitary control and quarantine administration in this area. Until the recent appearance of Russian and German vessels, she enjoyed a monopoly of the steam navigation; and her commercial interests have far exceeded those of any other nation. The maintenance by the Indian Government since 1864 of the sub-

marine cables from Fao to Jask, and of the lines from that place to Karachi and Muscat, has tended to increase an already preponderating influence. The protection of the pearl fisheries, on which the existence of the maritime Arabs depends, has also devolved upon Great Britain, who has, moreover, consistently warded off intruders, British subjects and foreigners alike, who sought to interfere with the time-honoured rights of the Arabs.

From 1900 onwards the traffic in arms assumed alarming proportions in the Gulf; it aroused all the piratical instincts latent in the character of the maritime inhabitants, and brought about a state of general demoralisation that constituted a serious menace to the maintenance of peace. Various efforts were made by the British Government to restrict the traffic; but French influence, based on the treaty of 1844 with Muscat, prevented effective action at that port, the chief emporium of the whole trade. In 1910 Great Britain established a naval blockade of the Makran coast. This measure was continued, at great expense, down to the outbreak of war, and achieved such a degree of success in the Gulf of Oman as to lead to a settlement with France (*cf.* above, pp. 42, 66). The traffic, checked in the southern, became, through German efforts, increasingly flourishing in the northern part of the Gulf, and during the first half of 1914 caused much anxiety to the British authorities.

The threatening activities and ambitions of other European Powers in the Gulf led Lord Lansdowne to declare, in the House of Lords in 1903, that "we should regard the establishment of a naval base or a fortified port in the Persian Gulf by any other Power as a very grave menace to British interests, and we should certainly resist it by all the means at our disposal." This declaration was formally reaffirmed in 1907 by Sir E. Grey, in a despatch to His Majesty's Ambassador at St. Petersburg, which further stated that "His Majesty's Government will continue to direct all their

efforts to the preservation of the *status quo* in the Gulf and the maintenance of British trade. In doing so they have no desire to exclude the legitimate trade of any other Power." These declarations have never been openly challenged; but in the years immediately preceding the war Turkey, under German instigation, adopted a policy of encroachment which seriously threatened the *status quo* at the head of the Gulf. In 1912-14 His Majesty's Government entered into far-reaching negotiations with the Turkish and German Governments, with the object of regularising the position. The resulting agreements had not, however, been ratified before the declaration of war.

### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

THE Mohammedan religion in one form or another prevails, almost to the exclusion of other creeds, in all the countries bordering on the Persian Gulf. Jews are few, except in the towns of Irak, and members of the Oriental Christian congregations are hardly found outside that province. The chief Mohammedan sects in the Persian Gulf region are Shiah, Sunni, Ibadhi, and Wahabi. On the western coast of the Persian Gulf proper, Sunnis, including nominal Wahabis, predominate in every territorial division, although there are strong Shiah communities in Hasa and Bahrein. On the eastern coast Shiahs are in the majority in most districts. The population of Arabistan is almost exclusively Shiah, and that sect predominates also in Irak. In the Gulf of Oman Shiahs are few in number; Persian Makran is entirely Sunni; while the Sultanate of Oman is Ibadhi and Sunni, with a small proportion of Wahabis.

Roman Catholic Missions have had a footing in the Persian Gulf since the seventeenth century, but latterly they have had only three permanent stations in Irak. The American Arabian Mission is established at Basra, Bahrein, Muscat, and Koweit. Schools are maintained by the Christian Missions, but there is on the whole very scanty provision for education in the Gulf.

#### (2) POLITICAL

The districts which adjoin the western coast of the Persian Gulf proper comprise a group of sheikdoms and emirates under Arab rulers. Of these the Sheikh of Koweit is a mediatised ruler under British protection, and Hasa is ruled by Ibn Saud, Emir of Nejd, who in June 1914 accepted the title of Vali of Nejd



and Hasa from the Turks, but has remained in close relation to the British and Indian Governments, and during the war threw in his lot with the British. The island of Bahrein is under the personal rule of Sheikh Isa, who has been supported by the British against other claimants of his family. El-Katr is now also under the control of Ibn Saud, Emir of Nejd. In Trucial Oman the position of the five ruling sheikhs, which include Sharga, Dibai, Abu Dhabi, and Ras al-Kheima, is governed by agreements with the British Government.

The Government of Oman is a sultanate or absolute monarchy, the present hereditary sultanate having arisen out of an ancient elective imamate. The populations of both west and north Oman do not acknowledge his sway, and live in practical independence of him under their own chiefs, the Sultan's authority being limited to his capital and the coast. A rival Imam has been set up in the interior by the principal Ibadhi Sheikh.

Of the Arabs of the coastal region the large majority are settled and live in towns, as the Beduin nomads who wander over the plains and interior, and reach even as far as Nejd or Jebel Shammar in the interior, form a proportion of the population which is small, and varies from time to time according to the location of the tribes. The population of the towns includes many Arabs recently nomadic who have now become settled. Among the settled Arabs of this region the main distinctions are either religious or political; tribal feeling is weak.

In Oman, political differences divide the population into two opposing factions known as Hinawie and Ghafiria, the result of a general civil war in the eighteenth century. The Hinawi faction consists mostly of Yamani tribes, while the Ghafiri are for the most part Nasiri. They live intermingled in groups and villages, and the factions are equally marked among settled and among Beduin tribes. The great majority of Hinawi tribes belong to the Ibadhi sect

of Islam; of Ghafiri tribes a considerable proportion are orthodox Sunnis, and a few are Wahabis of Oman.

Tribal organisation in Oman is loose; some tribes are scattered, others, though compact, are broken up into sections headed by sheikhs who acknowledge no common authority, and in only a few cases is the tribe governed by a Tamima, a chief whose power extends over all its branches. This office, which is nominally elective, is in practice hereditary.

Among the nomads of the Arabian coastal region tribal feeling is strong. Important tribes are: (a) the Ajman, of whom the greater number have their headquarters in Hasa; (b) the Awazim and Rashaida, who are found for the most part in Koweit territory.

The districts of Irak at the head of the Gulf formed, before the war, a part of the Turkish vilayet of Basra. On the right bank of the Shatt el-Arab are Arabs belonging chiefly to the tribe of Idan, with a few Muhaisin from across the river. Power is in the hands of the landowners and village sheikhs; there is very little tribal feeling, except among the Muhaisin and the Kaab, who look to the Sheikh of Mohammera as their chief.

The government of south Arabistan is administered by the Sheikh of Mohammera as Governor of Mohammera and its dependencies, nominally under the Persian Government; he is head of the Muhaisin tribe, and also exercises control over the powerful Kaab tribe. The Sheikh has been virtually independent, but his position was weakened when in 1902 the control of the customs of the port was transferred to the new Belgian Administration in exchange for a subsidy (*cf.* p. 56).

In Arabistan the tribal system is more highly developed; it does not rest, however, upon a rigid basis of race, and the strength of the tribe or section is liable to be increased by addition to its numbers from without, or diminished by desertion from within. Sheikhs or headmen of the tribes or sections are generally chosen from a family in which the office is hereditary. Some of the tribes are settled, others are nomadic,

while a considerable number are in a transitional stage between the two. The settled and semi-settled tribes are mainly agricultural, and the nomadic mainly pastoral, but even the latter cultivate a certain amount of grain in winter.

In south Arabistan the principal tribes are the Muhaisin and the Kaab; the former are politically, the latter numerically the stronger. The Muhaisin have their centre at Mohammera and are a settled tribe. The Kaab, whose focus is Felahieh, should probably be regarded as settled. The principal nomad tribes are the Beni Turuf, Beni Saleh, and Beni Tamim. Beh-behan, although geographically belonging to Fars, has a government and administration of its own. A large number of the inhabitants belong to the Kuhgilu, a division of the Lur tribe; each division of the tribe has its own chief.

Local districts of the Persian coast are for the most part under the government of a local hereditary chief, khan, or sheikh, who collects the land-tax in his own domain on behalf of the Persian Government. Certain districts are in a very disturbed state, others are remarkably orderly, but the coastal inhabitants are for the most part much more civilized than the tribesmen of the interior. Blood feuds are common, and cattle raids sometimes lead to encounters between the different tribes and factions. There are no criminal courts beyond the personal administration of the Governor or local khan; civil justice of a sort is dispensed, but it is extremely venal.

Persian Makran is nominally administered by a Governor, who has his seat at Bampur, subject to the authority of the Persian Governor-General of Kirman; as a matter of fact, however, this official is rarely appointed, and the country is in a condition of anarchy. Makran is divided into five districts, each of which is ruled by a chief who is supposed to pay tribute to the Governor, but in the administration of his district is free from interference by the Persian executive. The

chiefs of districts are assisted by the religious authorities or *mullahs*, and by headmen of the villages. There is no organized system of law and order, and serious disturbances have been common in recent years. The blood feud remains customary, and slavery prevails in most parts of the country.

During the course of the recent war, treaty relationships were established between Great Britain and all the rulers of the Arab littoral from Muscat to Mohammera. A collective assurance was issued to the Gulf Chiefs and their subjects on November 3, 1914, to the effect that Great Britain would do her utmost to preserve for them their liberty and religion. In consideration of professions of loyalty from the Sheikhs of Koweit and Mohammera on the outbreak of war with Germany, the Government of India undertook that Basra should never again be subject to Turkish authority; that Koweit should be recognised as an independent principality under British protection; that Great Britain would endeavour to maintain the Sheikh of Mohammera in his present state of local autonomy *vis-à-vis* the Persian Government, would support him against encroachment upon his rights or property by any Power, and would safeguard him to the best of her ability against any unprovoked attack by a foreign Power. The undertakings to the Sheikh of Mohammera also included a limited dynastic guarantee.

The expulsion of the Turks from the shores of the Gulf made it desirable for Great Britain to regularise the position of El-Katr. By a treaty signed on November 3, 1916, and ratified on March 23, 1918, Sheikh Abdullah of El-Katr assimilated his position to that of the Trucial Chiefs, and affixed his signature to all the treaties and engagements existing between them and Great Britain. The British Government, in addition, undertook to afford their good offices to the Sheikh in the event of unprovoked aggression by land. A proclamation prohibiting the arms traffic was issued by Sheikh Abdullah at the same time.

The friendly attitude of Ibn Saud on the outbreak

of war with Turkey made it imperative that His Majesty's Government should come to a definite understanding with him. As a result of negotiations a treaty was signed on December 26, 1915, and ratified on July 18, 1916, by which Great Britain recognised Ibn Saud as independent ruler of Nejd and Hasa (the boundaries to be determined hereafter), and gave him a limited dynastic guarantee. British arbitration and support were promised to Ibn Saud in the case of foreign aggression. Great Britain assumed control of the foreign relations of Ibn Saud, who, moreover, undertook not to alienate any territory to a foreign Power except with the consent of His Majesty's Government. Ibn Saud promised to refrain from aggression on Koweit, Bahrein, El-Katr, and Trucial Oman. Provision was made for the conclusion of a further detailed treaty between the two parties.

These agreements constitute no departure from the traditional policy of Great Britain in the Persian Gulf, but they strengthen her position for the continuance of her work of maintaining the *status quo* against internal disorder or foreign menace.

## GENERAL OBSERVATIONS

The situation in the Persian Gulf does not appear to offer any ground for disagreement between those nations who share in the benefits of British achievements in this region, and who are required only to acquiesce in established treaty relationships and in the principle of self-denial in regard to territorial acquisition to which Great Britain herself has adhered.

The peculiar interests—strategic, political, and commercial—of Great Britain in the Persian Gulf have never been denied; they are intimately connected with the welfare of India and the security of communication with the outposts of the Empire. For the safeguarding of these interests the maintenance of the *status quo* in the Gulf and the absence of competing foreign influences in the interior of Arabia are

essential. The freedom of the Arabs from foreign domination has been promised, and should in some form be assured. It is imperative that their relations with the British Government should be maintained unimpaired, and that Great Britain should continue, as hitherto, to perform her especial duties and to retain complete ascendancy in the Persian Gulf.

## APPENDIX

### 1.--- GENERAL TREATY BETWEEN GREAT BRITAIN AND THE ARAB TRIBES OF THE PERSIAN GULF, 1820.

In the name of God, the merciful, the compassionate.

Praise be to God, who hath ordained peace to be a blessing to His creatures. There is established a lasting peace between the British Government and the Arab tribes, who are parties to this contract, on the following conditions:—

*Article 1.* There shall be a cessation of plunder and piracy by land and sea on the part of the Arabs, who are parties to this contract, for ever.

*Article 2.* If any individual of the people of the Arabs contracting shall attack any that pass by land or sea of any nation whatsoever, in the way of plunder and piracy and not of acknowledged war, he shall be accounted an enemy of all mankind, and shall be held to have forfeited both life and goods. An acknowledged war is that which is proclaimed, avowed, and ordered by Government against Government, and the killing of men and taking of goods without proclamation, avowal, and the order of a Government is plunder and piracy.

*Article 3.* The friendly (literally the pacificated) Arabs shall carry by land and sea a red flag, with or without letters in it, at their option, and this shall be in a border of white, the breadth of the white in the border being equal to the breadth of the red, as represented in the margin (the whole forming the flag known in the British Navy by the title of white pierced red); this shall be the flag of the friendly Arabs, and they shall use it and no other.

*Article 4.* The pacificated tribes shall all of them continue in their former relations, with the exception that they shall be at peace with the British Government, and shall not fight with each other, and the flag shall be a symbol of this only, and of nothing further.

*Article 5.* The vessels of the friendly Arabs shall all of them

have in their possession a paper (register) signed with the signature of their Chief, in which shall be the name of the vessel, its length, its breadth, and how many Karahs it holds. And they shall also have in their possession another writing (port clearance) signed with the signature of their Chief, in which shall be the name of the owner, the name of the nacodah, the number of men, the number of arms, from whence sailed, at what time, and to what port bound. And if a British or other vessel meet them they shall produce the register and the clearance.

*Article 6.* The friendly Arabs, if they choose, shall send an envoy to the British Residency in the Persian Gulf with the necessary accompaniments, and he shall remain there for the transaction of their business with the Residency; and the British Government, if it chooses, shall send an envoy also to them in like manner; and the envoy shall add his signature to the signature of the Chief in the paper (register) of their vessels, which contains the length of the vessel, its breadth, and tonnage; the signature of the envoy to be renewed every year. Also all such envoys shall be at the expense of their own party.

*Article 7.* If any tribe, or others, shall not desist from plunder and piracy, the friendly Arabs shall act against them according to their ability and circumstances, and an arrangement for this purpose shall take place between the friendly Arabs and the British at the time when such plunder and piracy shall occur.

*Article 8.* The putting men to death after they have given up their arms is an act of piracy, and not of acknowledged war; and if any tribe shall put to death any persons, either Muhammadans or others, after they have given up their arms, such tribe shall be held to have broken the peace; and the friendly Arabs shall act against them in conjunction with the British, and, God willing, the war against them shall not cease until the surrender of those who performed the act and of those who ordered it.

*Article 9.* The carrying-off of slaves, men, women, or children, from the coasts of Africa or elsewhere, and the transporting them in vessels, is plunder and piracy, and the friendly Arabs shall do nothing of this nature.

*Article 10.* The vessels of the friendly Arabs, bearing their flag above described, shall enter into all the British ports and into the ports of the allies of the British so far as they shall be able to effect it; and they shall buy and sell therein; and, if any shall attack them, the British Government shall take notice of it.

*Article 11.* These conditions aforesaid shall be common to all tribes and persons, who shall hereafter adhere thereto in the same



manner as to those who adhere to them at the time present. End of the Articles.

- (Sd.) W. GRANT KEIR,  
Major-General.
- „ HASSUN BIN RAHMAH,  
Sheikh of Hatt and Fahleia, formerly  
of Ras-ool-Kheimah.
- „ KAZIB BIN AHMED,  
Sheikh of Jourat al Kamra.
- „ SHAKBOUT,  
Sheikh of Aboo Dhebbec.
- „ HASSUN BIN ALI,  
Sheikh of Zyah.
- „ ZAID BIN SYF,  
Uncle of Sheikh Muhammad of Debay.
- „ SULTAN BIN SUGGUR,  
Chief of Shargah.
- „ SYUD ABDOOL JALIL BIN SYUD YAS,  
Vakeel of Sheikh Suleman bin Ahmed  
and Sheikh Abdoolla bin Ahmed, of  
the family of Khalifa, Sheikhs of  
Bahrein.
- „ SULEMAN BIN AHMED.
- „ ABDOOLLA BIN AHMED.
- „ RASHED BIN HAMID,  
Chief of Ejman.
- „ ABDOOLLA BIN RASHID,  
Chief of Umm-ool-Keiweyn.

## II.—TREATY OF PEACE IN PERPETUITY AGREED UPON BY THE CHIEFS OF THE ARABIAN COAST IN BEHALF OF THEMSELVES, THEIR HEIRS AND SUCCESSORS, UNDER THE MEDIATION OF THE RESIDENT IN THE PERSIAN GULF, 1853.

*Article 1.* That from this date, *viz.*, 25th Rujjub 1269, 4th May. 1853, and hereafter there shall be a complete cessation of hostilities at sea between our respective subjects and dependants, and a perfect maritime truce shall endure between ourselves and between our successors respectively for evermore.

*Article 2.* That in the event—which God forbid!—of any of our subjects or dependants committing an act of aggression at sea upon the lives or property of those of any of the parties to this agreement, we will immediately punish the assailants and proceed to afford full redress upon the same being brought to our notice.

*Article 3.* That in the event of an act of aggression being committed at sea by any of those who are subscribers with us to this engagement upon any of our subjects or dependants, we will not proceed immediately to retaliate, but will inform the British Resident or the Commodore at Bassidore, who will forthwith take the necessary steps for obtaining reparation for the injury inflicted, provided that its occurrence can be satisfactorily proved.

We further agree that the maintenance of the peace now concluded amongst us shall be watched over by the British Government, who will take steps to ensure at all times the due observance of the above Articles, and God of this is the best witness and guarantee.

(Sd.)	ABDOOLLA BIN RASHED, Chief of Ummool Keiwyn.
„	HAMED BIN RASHED, Chief of Ejman.
„	SAEED BIN BUTYE, Chief of Debay.
„	SAEED BIN TAHNOON, Chief of the Beniyas.
„	SULTAN BIN SUGGAR, Chief of the Joasmees.

Approved by the Governor-General in Council on August 24, 1853.

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#### MAPS

The Persian Gulf and adjacent countries are shown on the War Office Map (G.S.G.S. 2385), scale 1:4,055,040 (1908, additions 1919). Lower Mesopotamia between Baghdad and the Persian Gulf is shown on another map (G.S.G.S. 2563), scale 1:1,000,000. Corrected to 1916. Railways revised, 1919.







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## TABLE OF CONTENTS

	PAGE
I. GEOGRAPHY PHYSICAL AND POLITICAL	
Position and Frontiers (general) . . . . .	1
Population (general) . . . . .	2
<i>Pondicherry</i>	
Surface and River System . . . . .	3
Climate . . . . .	3
Sanitary Conditions . . . . .	4
Race . . . . .	4
Population . . . . .	5
<i>Karikal</i>	
Surface, Coasts, and River System . . . . .	6
Climate and Sanitary Conditions . . . . .	6
Race . . . . .	6
Population . . . . .	6
<i>Yanaon</i>	
Surface and River System . . . . .	7
Climate . . . . .	8
Race . . . . .	8
Population . . . . .	8
<i>Mahé</i>	
Surface and River System . . . . .	8
Climate . . . . .	9
Race . . . . .	9
Population . . . . .	10
<i>Chandernagor</i>	
Climate . . . . .	10
Race . . . . .	10
Population . . . . .	10

	PAGE
II. POLITICAL HISTORY	
Chronological Table . . . . .	11
(1) Domestic . . . . .	12
(2) Foreign Relations . . . . .	15
Table of Conventions and Agreements . . . . .	16
III. SOCIAL AND POLITICAL CONDITIONS	
(1) Religious . . . . .	17
(2) Political . . . . .	18
(3) Military Organization . . . . .	19
(4) Public Education . . . . .	19
IV. ECONOMIC CONDITIONS	
(A) MEANS OF COMMUNICATION	
(1) Internal	
(a) Roads . . . . .	21
(b) Rivers and Canals . . . . .	21
(c) Railways . . . . .	22
(d) Posts and Telegraphs . . . . .	24
(2) External	
(a) Ports . . . . .	25
(i) Accommodation, &c. . . . .	25
(ii) Adequacy to economic needs . . . . .	26
(b) Shipping Lines . . . . .	27
(B) INDUSTRY	
(1) Labour . . . . .	29
(2) Agriculture . . . . .	29
(a) Products of Commercial Value . . . . .	29
Pondicherry . . . . .	29
Karikal . . . . .	32
Yanaon . . . . .	32
Mahé . . . . .	32
Chandernagor . . . . .	33
(b) Irrigation . . . . .	33
(c) Forestry . . . . .	34
(d) Land Tenure . . . . .	35
(3) Fisheries . . . . .	36
(4) Minerals . . . . .	36
(5) Manufactures . . . . .	36
Textile and Chemical . . . . .	36
Native Industries . . . . .	38

# TABLE OF CONTENTS

	PAGE
(C) COMMERCE	
(1) Domestic . . . . .	39
(2) Foreign . . . . .	39
(a) Exports . . . . .	42
Quantities and Values . . . . .	42
Countries of Destination . . . . .	46
(b) Imports . . . . .	48
Quantities and Values . . . . .	48
Countries of Origin . . . . .	48
Customs and Tariffs . . . . .	50
(c) Commercial Treaties . . . . .	50
(D) FINANCE	
(1) Public Finance . . . . .	52
(2) Currency . . . . .	53
(3) Banking . . . . .	53
GENERAL OBSERVATIONS . . . . .	54
AUTHORITIES . . . . .	55
MAPS . . . . .	57



# I. GEOGRAPHY PHYSICAL AND POLITICAL

## POSITION AND FRONTIERS (GENERAL)

THE French Possessions in India (*Établissements français de l'Inde*) consist of five small detached territories, namely, Pondicherry, Karikal, Yanaon, Mahé, and Chandernagor, with a total population, in 1915 (according to the French census), of 266,828.<sup>1</sup>

*Pondicherry* is the chief settlement (area 115 square miles), the capital of which, Pondicherry Town, is the seat of the governor of all the Possessions. It is situated on the east (Coromandel) coast, 122 miles by rail, and 105 miles by road, south-south-west of Madras. It comprises one main tract of land containing Pondicherry, Oulgaret, and Villenour, two other fairly important enclaves, one (Bahour) on the River Ponnaiyar, and one on the Pambear and Gingee, and besides these four to the north, one to the west, and five to the south. All these lie along the coast and extend to a distance of some 18 miles inland. They are surrounded by the British district of South Arcot.

*Karikal* (area 53 square miles) is also on the Coromandel coast, about 90 miles south of Pondicherry. It consists of a single tract stretching along the east coast between Tranquebar and Nagore (both outside French territory) for a distance of some 10½ miles direct, and inland to an extreme distance of 9 miles. It is bordered by the British district of Tanjore.

<sup>1</sup> Another estimate gives the following figures: Pondicherry, 173,000; Karikal, 60,000; Yanaon, 5,116; Mahé, 10,689; Chandernagor, 28,016; total, 276,821.

*Yanaon*<sup>1</sup> (area 5 square miles) is near the east coast, in the delta of the Godavari, and about 370 miles in a direct line north-east of Pondicherry. It lies 5½ miles south of Coringa, a closed port.

*Mahé* (area 26 square miles) is on the west (Malabar) coast, nearly due west of Pondicherry. It consists of the town of Mahé on the left bank of the river of that name, and a detached portion of territory called Nalutara, on the right bank, containing the four *aldées* (big villages) of Chambara, Chalakara, Palour, and Pandaquel.

*Chandernagor* (area 4 square miles) is on the Hooghly river, 22 miles by rail above Calcutta.

The area of the whole of these possessions is equal to the department of the Seine.

There are also certain small plots (*loges*) elsewhere than in French territory over which the French Government claim to exercise certain rights of jurisdiction. Thus at Masulipatam two tracts of about 1,300 square yards and a village known as Francepett (i. e. 'French village') are owned by the French Government. At Calicut there is a similar tract of six acres. At Balasor, in the district of that name in Bengal, there is a *loge* of thirty-eight acres; at Ghoorpuda of two roods. There are other *loges* at Cossimbazar (Kasimbazar), at Dacca, at Patna, and at Jugdea (Yougdea) in Tippera, and a factory at Surat. French jurisdiction is practically non-existent in these places.

### POPULATION (GENERAL)

The census of 1911 showed that of 395 Europeans resident at Pondicherry 373 were French, and of 83 Europeans at Karikal 81 were French, and that of 1,136 Eurasians at Pondicherry 1,021 were French Eurasians. Of 46,070 Indian natives at Pondicherry

<sup>1</sup> Spelt 'Yanam' in the *Imperial Gazetteer*.

36,688 were French subjects, and of 19,546 Indian natives at Karikal 16,908 were French subjects. Chandernagor is so closely connected with Calcutta that it is natural to find that of 610 Europeans only 102 were French, and that of 24,593 natives only 9,900 were French subjects. At the date of the 1911 census the whole number of Europeans other than French in the 'Establishments' was 542. There were only three Germans—two men and one woman.

## PONDICHERRY

### SURFACE AND RIVER SYSTEM

The whole region is low, sandy, and alluvial, intersected by deltaic channels of the Gingee, Ponnaiyar, and other streams, and interspersed with 57 lagoons, the largest of which, the Lake of Oussoudou,  $5\frac{1}{2}$  miles from Pondicherry Town, has a surface of nearly 20,000 acres. All the rivers are navigable for about 16 miles from their mouths, thanks to a series of barrages, but this is only for four months in the year, and for flat-bottomed boats. The chief river is the Gingee, which receives on its right bank the waters of the Pambeear and Coudouveear; before receiving the waters of the latter, it breaks into two mouths, the Ariancoupom and Chounambar. Farther south is the Maltar, whose lower waters are in British territory, and still farther south the Ponnaiyar. These rivers are liable to inundation, especially the Ponnaiyar.

### CLIMATE

As elsewhere in India the year may be divided into three seasons—the cold weather (October to February), the hot weather (March to June), and the rains. The rainy season sets in with the south-west monsoon, and the north-east monsoon prevails during the cold-weather



period and early part of the hot season. In the hot season the mean temperature in day-time ranges from 88° F. (31° C.) to 104° F. (40° C.), and at night from 81° F. (27° C.) to 84° F. (29° C.); during the day the hot 'land wind' (*neruppu-kattu*) makes itself felt. In the cool season the day temperature is usually from 77° F. (25° C.) to 90° F. (32° C.) and the night temperature from 55° F. (13° C.) to 68° F. (20° C.). Both monsoons bring rain to the district, and July–August and October–December are rainy months, but the south-west monsoon is weakened and dried by its passage over southern India, and the annual rainfall does not as a rule greatly exceed 50 inches, while severe droughts are not uncommon. Cyclones occur most usually at the changes of the monsoons; but Pondicherry is less frequently visited by them than Madras.

#### SANITARY CONDITIONS

The chief diseases are cholera (practically this affects only the natives), marsh fevers in certain places, elephantiasis, diabetes, and dysentery.

#### RACE

The inhabitants of Pondicherry and Karikal are mostly Tamils, belonging to the Dravidian stock. The Tamil language is spoken by about 160,000 people in the French Possessions. Five newspapers in Tamil are printed in Pondicherry.

The progeny of the original European settlers (largely Portuguese) and low-caste women, are called Topas. They often live like Indians, and differ only in their costume. The birth-rate is lower among them than in other sections of the community.

## POPULATION

*Distribution, &c.*—The latest estimate of population was made in 1915. The figures then given were :<sup>1</sup>

Pondicherry	.	.	.	.	47,185
Oulgaret	.	.	.	.	24,345
Villenour	.	.	.	.	18,392
Tiroubouvane	.	.	.	.	18,382
Bahour	.	.	.	.	18,048
Nettapacom	.	.	.	.	13,527
Modeliarpeth	.	.	.	.	15,740
Ariancoupom	.	.	.	.	10,868
Total	.	.	.	.	166,487

This represents a decrease of 6,420 since 1911, and 7,969 since 1901. In Pondicherry the birth-rate per thousand was 34·5 in 1915, and the death-rate 38·8.

The population of mixed descent for the whole of the ' Establishments ' in 1911 was 1,198 ; nearly all in Pondicherry. The French population numbered 373 in Pondicherry out of a total of 598 in the whole of French India, of whom 429 were born in India.

*Towns and Villages.*—Pondicherry Town (lat. 11° 56' N., long. 79° 50' E.) is divided by a canal into two unequal divisions : White Town, occupying 15 acres to the east, and Black Town, occupying 40 acres to the west. The town is well supplied with water, principally from artesian wells at Mudrapalaiyam (3½ miles south-west), and is lighted by electricity. It is without a drainage system. Besides Pondicherry Town there are some 93 larger villages (*aldées*) and 141 lesser villages.

<sup>1</sup> But see note on p. 1.

## KARIKAL

### SURFACE, COASTS, AND RIVER SYSTEM

The territory of Karikal consists of a single tract stretching along the east coast from the River Nandalar to the River Vettar. It is a low, fertile country, alluvial and deltaic; and particularly rich in 'humus', so that it is very productive, especially of rice. It is watered by eight distributaries of the River Cauveri, as well as certain artificial canals constructed in very remote times. The artesian borings show a greater degree of salt, indicating that the sea has penetrated more than in Pondicherry.

The coast is low in this neighbourhood, with only a few fishing villages along it. The only port is Karikal on the River Arasalar, one of the branches of the Cauveri. The rivers are barred, and can be navigated from the sea only after heavy rains have sufficiently swollen their streams, when cargo may be landed in flat-bottomed boats.

### CLIMATE AND SANITARY CONDITIONS

What is said about Pondicherry applies to Karikal.

### RACE

The population are Tamils, and have the same characteristics as the inhabitants of Pondicherry (see p. 4).

### POPULATION

*Distribution, &c.*—The estimate of population in 1915 was as follows :

Karikal	.	.	.	.	.	18,806
Tirnoular	.	.	.	.	.	10,583
Grande Aldée	.	.	.	.	.	7,961
Neravy	.	.	.	.	.	6,184
Nedouncadou	.	.	.	.	.	7,305
Cotchery	.	.	.	.	.	6,028
						<hr/> 56,867

This shows a decline of 2,954 since 1911 ; the census of that year showed a small increase over that of 1901 ; previously the population had greatly decreased—in 1883 it was 93,055. Nevertheless, with a population of 1,128 per square mile, it is more densely inhabited than almost any part of Tanjore. The French population in 1911 was 81.

*Towns and Villages.*—The town of Karikal (i.e. Kāraikal, 'fish-pass') is situated (lat. 10° 55' N., long. 79° 51' E.) on the north bank of the Arasalar river, about 1½ miles from its mouth. The commune has a population of 18,806, of whom about half are actually in the town. It is the terminus of a line from Paralamb on the Tanjore district railway. It is unfortunate that the line is not continued to the shore, since the facilities of the port would be greatly increased by such an extension, and especial stimulus would be given to the growing trade in ground-nuts. The Standard Oil Company of America has stores and tanks here, and uses Karikal as a distributing centre for this part of India.

The territory is divided into six communes, and contains 110 villages.

## YANAON

### SURFACE AND RIVER SYSTEM

Yanaon is a town and small tract bounded on the south by the Godavari river, and on the north and east by one of its distributaries, the Coringa. It is an enclave in the British district of Godavari, and lies in a deltaic region.

The mouth of the Godavari is blocked ; approach to Yanaon is made by the River Coringa. A canal connecting these two mouths is on the borders of the French territory. Water for irrigation is supplied free of cost from the British canal which passes by Yanaon.

## CLIMATE

The dry season is from the beginning of November to the middle of June; the rainy season from the middle of June to the beginning of November. The Godavari overflows its banks between July and September. The south-west monsoon blows from June to September, the north-east monsoon from October to February. Between May and July a west wind often blows. The temperature ranges from 68° F. (20° C.) to 79° F. (26° C.) in November, December, and January; from 80° F. (27° C.) to 97° F. (36° C.) in February, March, and April; from 97° F. (36° C.) to 107·5° F. (42° C.) in May and June; and from 83° F. (28° C.) to 93° F. (34° C.) for the rest of the year. The country is greatly exposed to cyclones.

## RACE

The inhabitants are Telugu, and speak the Telugu language, the most widely diffused of any in southern India. They are an enterprising people, good farmers, and, when they have the opportunity, skilful seamen. There are five Brahman castes in this district, two Kshatriya, one Vaisya, eleven Sudras, besides more than thirty inferior industrial castes, and a great number of mixed castes.

## POPULATION

The estimate of 1915 gives the number of the population as 5,011; this is an increase of 544 since 1911, but there had been an almost exactly equal decrease since 1891, when the population was 5,005.

## MAHÉ

## SURFACE AND RIVER SYSTEM

The territory of Mahé, on the west coast, between Calicut and Tellicherry, and about four miles south-east of the latter town, lies within the British district

of Malabar. It is an undulating tract between the coast and the low calcareous hills, outliers of the western Ghats, that rise behind it. The surface is uneven and in parts rocky. It is covered with luxuriant vegetation, mostly coco-nut palm, which is economically the most important tree. The territory consists of two parts—the little town of Mahé, which lies on the left bank of the river of that name and is used by the French Government as a coaling-station; and the isolated district of Nalutara on the other bank, containing the four villages (*aldées*) of Chambara, Chalakara, Palour, and Pandaquel.

The bar of the River Mahé is dangerous, except in very smooth water, and there are rocks off the mouth of the river on both sides. During the dry season the channel leading into the river is only 20 yards wide. Above the bar small craft can navigate the river for about  $7\frac{1}{2}$  miles from the mouth.

#### CLIMATE

The climate is damp, but, on the whole, healthy, Mahé and Chandernagor being superior in this respect to other French colonies in India. The temperature is uniform: the normal range does not exceed  $71^{\circ}$  F. ( $22^{\circ}$  C.)– $86^{\circ}$  F. ( $30^{\circ}$  C.), the mean temperature is about  $80^{\circ}$  F. ( $27^{\circ}$  C.). Rainfall is heavy and un-failing. The south-west monsoon begins in May; the rains break in June and continue, with the monsoon, to the end of September, and three-quarters of the total annual precipitation (which averages probably about 120 inches) occurs during these four months.

#### RACE

The bulk of the inhabitants are Malayalams, and speak a language closely allied to Tamil. There are a considerable number of rich Mussulmans in Mahé, called Maplais or Maplots. Among the castes there is

one peculiar to Mahé, viz. the Nayas (indigenous aristocracy), a Sudra caste.

#### POPULATION

The estimate of 1915 gives the population as 10,819. This is an increase on the figures of 1911, which were 10,425, and the figures of 1901, which were 10,298.

#### CHANDERNAGOR

Chandernagor is a town, with a small surrounding territory, on the right bank of the Hooghly, 22 miles by rail above Calcutta and immediately below Chinsura. It is little more than a 'quiet suburban town', with little trade by river and little external trade of any kind.

The River Hooghly, which at Calcutta has a depth of nearly five fathoms, is never more than 10 ft. deep in front of Chandernagor, and in that quarter is becoming silted up by the alluvial deposits of the Ganges.

#### CLIMATE

The climate is favourable, the heat being tempered by the trees. The rainy season is from June to the middle of October, and the rains are torrential in August. The average temperature is 88° F. (31° C.); the maximum (in May) is 99° F. (37° C.).

#### RACE

The inhabitants are chiefly Bengali, and speak Bengali and Hindustani. There are also a certain number of Gaurs.

#### POPULATION

The estimate of the population was 27,644 in 1915, an increase on the figures of 1911, which were 25,325. The French population numbered 102 in that year, and there were 508 Europeans other than French, nearly all of whom were British.

## II. POLITICAL HISTORY

### CHRONOLOGICAL TABLE

- 1664 Establishment of 'La Compagnie des Indes Orientales'.
- 1673 (?) First settlement at Chandernagor.
- 1674 François Martin lands at Pondicherry and obtains permission to build a factory.
- 1675 A small fortification built at Pondicherry.
- 1676 (?) Chandernagor slightly fortified.
- 1688 Formal grant of site of Chandernagor.
- 1693 Pondicherry captured by the Dutch.
- 1697 Treaty of Ryswyck.
- 1699 Pondicherry restored to France under the treaty.
- 1721 Factory established at Mahé.
- 1725-6 Mahé seized and occupied by the French, with certain small dependencies.
- 1731 Dupleix assumes charge of Chandernagor.
- 1739 Grant of Karikal by Chanda Sahib.
- 1742 Dupleix assumes charge of Pondicherry (January).
- 1748 Successful defence of Pondicherry.
- 1749 Grant of 81 additional villages near Karikal by Chanda Sahib.
- 1750-2 Occupation and formal cession of Yanaon.
- 1754 Recall of Dupleix.
- 1757 Chandernagor captured by English ; French settlers dispersed.
- 1759 Demolition of Chandernagor.
- 1760 Karikal and Mahé taken by English ; battle of Wandiwash and siege of Pondicherry.
- 1761 Pondicherry capitulates ; subsequent demolition.
- 1763 Peace of Paris.
- 1778 The settlements again taken by English.
- 1783 Treaty of Versailles ; settlements restored to French.
- 1793 The settlements again taken by English.



- 1802 Peace of Amiens ; settlements ordered to be restored, but retained by Lord Wellesley.
- 1803 Renewal of war ; restoration of settlements cancelled.
- 1814-15 Treaties closing the Napoleonic wars.
- 1816-17 Actual restoration for the last time of the settlements to the French, as on January 1, 1792.<sup>1</sup>

### (1) DOMESTIC

THE first serious step towards acquiring for France a share in the commerce of India was taken in 1664, when Colbert established the 'Compagnie des Indes Orientales'. The institution then founded never attained success as a commercial company. The complicated history of the French East India Company and of French enterprise in India is, on the whole, a story of failure. It may be studied in ample detail in the French works specified in the list of authorities (p. 56).

The two principal French settlements, namely Pondicherry and Chandernagor, originated almost simultaneously. About 1673 (the exact date is uncertain <sup>2</sup>) some French traders settled at Chandernagor on the Hooghly, twenty-two miles north of Calcutta, which was founded in 1690. The site of the French settlement was acquired permanently in 1688. In January 1674, François Martin, leading a party of refugees expelled by the Dutch from St. Thomé near Madras and from Masulipatam farther north on the same coast, landed at Pondicherry, where he established a trading station with the consent of the local authorities. Slight fortifications were erected both at

<sup>1</sup> But the *loge* at Calicut was not given up until Feb. 1, 1819 (Aitchison, vol. x, 4th ed., no. lxxxii, p. 252). The limits of Mahé were not finally determined until Nov. 14, 1853, when the French withdrew certain claims (Aitchison, *ibid.*, no. lxxxiii, p. 252).

<sup>2</sup> Weber (p. 171) gives the date positively as 1673. The *Imperial Gazetteer* gives 1672 or 1676.

Pondicherry and at Chandernagor in or about 1675 and 1676. A small foreign town gradually grew up at Pondicherry. About 1685 the French Company suffered acute financial distress, and could not help the Indian settlements.

In 1693 the capture of Pondicherry by the Dutch destroyed French influence for the time being. Holland retained the settlement until 1699, when it was restored to France in accordance with the Treaty of Ryswyck (1697). Chandernagor continued to be an insignificant little place, until Dupleix took charge as Administrator. In the course of ten years (1731-41) he built two thousand houses and largely developed trade. The result was that in 1757 Clive was justified in describing Chandernagor as 'a large, rich, and thriving colony'. In March of that year, three months before the battle of Plassey, Clive and Admiral Watson captured the town. As a matter of policy, the French settlers were exiled; and in 1759 the buildings, public and private, were demolished.

On January 13, 1742, Dupleix assumed office as Governor of Pondicherry and the French Possessions in India. The energy which had transformed Chandernagor was transferred to the new field and effected extensive improvements. Dupleix successfully defended the town in 1748 against an English fleet. His story belongs to general history. Here it is sufficient to say that his ambitious policy was disapproved and reversed by the French Government, and that he was recalled in 1754. In 1761 Eyre Coote took Pondicherry after a prolonged siege. A little later the town was deliberately destroyed, so that, as Orme remarks, 'not a roof was left standing in this once fair and flourishing city'.

It is needless to follow the fortunes of the minor settlements, namely Mahé, acquired in 1725-6; Karikal, acquired in 1739; and Yanaon, acquired in 1750-2.

Their fate followed that of Pondicherry, but they never suffered much material injury in warfare.

The modern history of the Possessions dates from the Peace of Paris in 1763, which restored them to France. Various accessions of territory which had been annexed from time to time were then cut off; and the Possessions were given back to France with boundaries substantially the same as those existing to-day. Restrictions on fortification were imposed, which remain in force.

In course of time both Chandernagor and Pondicherry were rebuilt. Chandernagor never recovered from the disaster of 1757, and has continued to be merely 'a quiet suburban town with little external trade'. Pondicherry has prospered. At the beginning of the nineteenth century Lord Valentia considered it to be second only to Calcutta.

The Possessions frequently changed hands during the Anglo-French wars. They were occupied by the British in 1778, 1793, and 1803, but were not injured.<sup>1</sup> They were restored to France by the treaties of 1783, 1814 and 1815, and finally handed over in 1816 and 1817.

Since the close of the Napoleonic wars the Possessions can hardly be said to have a history. Pondicherry became a well-planned, handsome town with good buildings, and has attained considerable prosperity in a quiet way. In 1880 it was made a municipality, with a mayor and a town council of eighteen members. Mahé is described as 'a decaying place'. In 1837 Yanaon was laid waste by a hurricane and inundation

<sup>1</sup> Lord Wellesley declined to hand over the French Possessions in accordance with the Peace of Amiens in 1802, which he did not expect to last. From 1803 they were legally British, but occupation by the Indian Government had been continuous from 1793.

from the sea. In 1884 serious floods in the Pondicherry territory rendered 30,000 people homeless. The boundaries of Chandernagor were rectified in 1853.

## (2) FOREIGN RELATIONS

Communications with foreign Powers are ordinarily conducted through the French Ministry of Foreign Affairs. But, portions of Pondicherry territory being mixed up in a most inconvenient way with the British district of South Arcot, the Magistrate-Collector or District Officer of that jurisdiction is necessarily invested with powers, as Special Agent, to deal directly with the French authorities for the settlement of questions concerning crime and extradition, land customs, excise, and kindred matters, which are often extremely troublesome. A British Consular Agent, usually an officer of the Indian army, is accredited to the French authorities and stationed at Pondicherry, his appointment being arranged by communication between the Foreign Office in London and the French Foreign Office.<sup>1</sup>

<sup>1</sup> Mutual extradition under judicial proceedings of all kinds is regulated by Article IX of the Convention dated March 7, 1815 (Aitchison, vol. i, 4th ed., no. lxxxiii, p. 259). Even fugitive debtors may be claimed.

## CONVENTIONS AND AGREEMENTS

The Conventions and Agreements still operative in whole or in part as to June 1, 1906, are printed in Aitchison, *Treaties, &c.*, ed. 4 (1909), vol. i, nos. lxxxiii-xc, pp. 255-86. Nos. lxxxvii, lxxxviii, and lxxxix are reprinted *ibid.*, vol. x, pp. 257-68. The essential points are exhibited in tabular form on the following page.

TABLE OF CONVENTIONS AND AGREEMENTS

<i>Serial No.</i>	<i>Aitchison, vol. I.</i>	<i>Date.</i>	<i>Parties.</i>	<i>Subject.</i>
1. Convention .	lxxxiii, p. 255 .	March 7, 1815	Great Britain, France . . . . .	Chiefly salt and opium; the arrangements made concerning both being superseded by Serial Nos. 2, 3, 4. Article 7, which secures the French the right of exporting 18,000 <i>maunds</i> of saltpetre yearly, seems to be still in force. (N.B. 1 <i>maund</i> = 82 lb.) Art. 8 forbids fortification and the maintenance of troops except so far as may be 'necessary for purposes of police'. It also secures safe residence in India for French subjects. Art. 9 deals with extradition; see note to section on Foreign Relations (p. 15). Stops French manufacture of salt, giving yearly compensation of 4,000 star pagodas (= 14,000 rupees). Art. 8 provides for necessary supply of salt to the French. Renews No. 2 indefinitely, subject to twelve months' notice. Modifies No. 1, and stops official direct supply of salt to Chandernagor, the inhabitants being left free to buy taxed salt; gives yearly compensation of 20,000 rupees for loss of salt revenue. Revision of boundaries of Chandernagor.
2. Convention .	lxxxiv, p. 261 .	May 13, 1818.	Governments of Madras and Pondicherry	
3. Convention .	lxxxv, p. 263 .	June 1, 1837 .	Ditto . . . . .	
4. Convention .	lxxxvi, p. 265 .	July 12, 1839 .	Govt. of India and Administrator of Chandernagor on behalf of France . . . . .	
5. Agreement ( <i>arrangement</i> ) .	lxxxvii, p. 268 .	March 31, 1853	Great Britain, France, Govt. of India and <i>Chef de Service</i> of Chandernagor on behalf of France . . . . .	
6. Convention .	lxxxviii, p. 278	July 16, 1884 .	Ditto . . . . .	
7. Opium Convention	lxxxix, p. 279 .	December 27, 1893	Govt. of India and Principal Administrator of Chandernagor on behalf of France . . . . .	Rescinds Art. VI of No. 1 permitting French to buy yearly 300 <i>maunds</i> of opium, and gives 3,000 rupees yearly as compensation. Renews No. 6 for 5 years from January 1, 1894, and gives 2,000 rupees yearly as extra compensation for confiscated opium.
8. Opium Convention	xc, p. 283 . .	March 18, 1905	Govt. of India and Administrator of Chandernagor on behalf of France . . . . .	Renews No. 7 for 2 years as from January 1, 1905.

No information of later date is obtainable.

### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

THE Indian population of all the settlements, which is almost wholly Hindu, enjoys the free exercise of its religion. The Europeans and Eurasians, or persons of mixed descent, are almost without exception Roman Catholics. Pondicherry is the seat of a *Préfet apostolique* or vicar-general for the French Possessions, and of an archbishop, who has suffragan bishops at Mysore, Coimbatore, Kumbakonam in the Tanjore district, and Malacca. The town also is the head-quarters of the French foreign missions. The bulk of the inhabitants are Sivaists in religion.

The caste system is the determining feature of native life in Pondicherry, as elsewhere in India. There are five Brahmanic castes in Pondicherry and Karikal, but the bulk of the population are Sudras. Of these there are enumerated eleven castes, twelve secondary castes, and eighteen low castes. But with a large number of these castes the name merely shows professional occupation and often includes people who have no connexion with one another and who are of different social status. Women of high caste do not show themselves in the street; those that appear there are either pariahs or belong to low castes. Under French rule caste distinctions tend to become ignored to some extent. The franchise is given to all irrespective of colour, caste, or creed.

The Christians are, as a rule, drawn from the lowest castes. They keep up the caste system to a considerable

extent, and in their churches a special part is assigned to the pariahs.

The Mohammedans number about one-twentieth of the whole population of the 'Establishments'. They are either *pattanis*, i. e. descendants of the original invaders, or (more frequently) *chouliahs* whose ancestors were forcibly converted to Islamism.

## (2) POLITICAL

The Governor of Pondicherry is, and always has been, except during the brief period of Lally's tenure of office as Commissary of the King (1758-61), the civil and military head of the French Possessions in India. The central administration at Pondicherry is constructed on lines suitable for a much more extensive territory.

Many departmental chiefs exist, severally supervising the Departments of Marine, Justice, Treasury, &c. In accordance with French usage, the officials are numerous and modestly paid. In 1845 the salary of the Governor was Rs. 1,400 a month, but no other official drew more than 400. The present rates of pay do not differ widely, but exact details are not available in England. Republican institutions have been transplanted from the West.

The Governor is assisted by a *Conseil Général*, dating in its present form from 1879, and composed of 28 members, representing all the Possessions, and elected by universal suffrage. Pondicherry is represented by 12 members, Chandernagor by 4, Karikal by 8, and Mahé and Yanaon by 2 each. The combined Possessions elect a Deputy and a Senator to represent them in the Chambers at Paris.

The Pondicherry territory is divided into eight communes (as in 1916), each managed by a communal or municipal board, on which native Indians are entitled to occupy a certain number of seats. The

communal council for the capital, the only town in the territory, is composed of a mayor and 18 members.

The judicial establishment comprises civil and criminal courts of first instance and a court of appeal. The Government at Pondicherry is controlled to a considerable extent by the Chambers in Paris.

The local affairs of Chandernagor are conducted by an Administrator or a *Chef de Service* subordinate to the Governor at Pondicherry. The Administrator is responsible for the Farasdanga *loge* at Balasor.

The Karikal territory, which includes 110 villages, is divided into three communes, each of which has a mayor and elected council. In the town of Karikal half of the seats are reserved for Europeans or their descendants. The settlement is in charge of an Administrator. Mahé is managed by a departmental head called *Chef de Service*. Yanaon is in charge of an Administrator. Although the population but slightly exceeds 5,000, the Administrator, who is head of the magistracy, the criminal court, and the police, has a council of 6 members to assist him in his work, besides a communal council of 12 members.

### (3) MILITARY ORGANIZATION

The military force is insignificant, and is kept up for police purposes only.

### (4) PUBLIC EDUCATION

Public instruction is controlled by a departmental head (*Chef de Service*) at Pondicherry. The college of the *Missions Étrangères* at Pondicherry provides secondary, English, upper primary, and 'cours normal' teaching in the *Collège Colonial*. The Calvé College, an undenominational establishment open alike to Europeans and natives, which is affiliated to Madras University, offers primary and upper primary instruc-



tion up to the standard for matriculation in that University. Facilities for studying law and medicine exist; and in 1908 a course in arts and industry was instituted. The *Collège Colonial* has a staff consisting of a sub-director, four professors, five assistant professors, five assistant masters, four *instituteurs*, and a professor of English; and the *Collège Calvé* (for superior primary and primary teaching) a sub-director, six *maîtres d'anglais*, and seventeen *instituteurs*. There are also three primary schools in the town; and for primary instruction in all the settlements there are ninety-six male and female teachers of French and one hundred and four of native languages, under an *inspecteur primaire*. There are also a large number of private schools. The total number of pupils is estimated at about 16,000.

The chief institution in Chandernagor is the *Collège Duplex*, formerly called St. Mary's Institution, founded in 1882, and under the direct control of the French administration. In 1914 it had six *instituteurs*, fourteen *maîtres d'anglais*, and one teacher of Sanskrit. The minor settlements possess good churches and school buildings and provide primary instruction. Karikal offers secondary and 'complementary' courses. There are two free schools in Yanaon, one for boys and one for girls, and three boys' schools and one girls' school in Mahé. A considerable public library exists at Pondicherry.

Two botanic gardens, the *Parc Colonial*, dating from 1827, and the *Jardin d'Acclimatation*, dating from 1861, have been established at Pondicherry for scientific experiments in agriculture and horticulture.

## IV. ECONOMIC CONDITIONS

### (A) MEANS OF COMMUNICATION

#### (1) INTERNAL

##### (a) *Roads*

THE French Possessions in India are so widely scattered in British territory that the means of communication are not capable of separate treatment. Pondicherry is on the main road from Cuddalore to Madras, and is 12 miles north of Cuddalore. The road from Cuddalore to Pondicherry and two roads from Pondicherry to Tindivanam, on the way to Madras, are metalled and bridged, and are practicable for wheeled traffic at all seasons of the year. Roads, chiefly (if not entirely) unmetalled, traverse the French territory in all directions. The best of them is the road by Villenour to Valudavour. Karikal, Yanaon, and Chandernagor are also served by British roads. Mahé is on the coast road running north from Beypore to Tellicherry; and a long wooden bridge, maintained by the Malabar District Board, gives access to British territory on the right bank of the River Mahé.

##### (b) *Rivers and Canals*

*Pondicherry.*—The river system is complicated by the circumstance that the 69,000 acres of superficial area in the Pondicherry district are scattered over a total superficial area of about 173,000 acres, and that the 92 French villages are not contiguous. The French territory consists of a series of enclaves, of

which the most important, comprising Pondicherry, Oulgaret, and Villenour, stretches along the upper bank of the River Pambear. Two others of the larger enclaves border on the rivers Ponnaiyar and Pambear, and the main stream of the Gingee. A canal from the Gingee traverses nearly the whole of the territory of Villenour, and is continued to the lagoon of Souttoukeny, twice crossing British territory and connecting with the Gingee at Moutiampett. The Villenour canal was made in 1828-9. It is 5.76 kilometres in length, and the bottom width is 2 metres. It passes under a weir of the large tank of Oussoudou by a 3-metre arch. The Souttoukeny canal was constructed in 1833. The bottom width is 4 metres, and the side slopes 1 to  $1\frac{1}{2}$  metres.

*Karikal*.—The Arasalar, and the canals which connect its various mouths, are navigable for small boats.

*Chandernagor*.—The Hooghly is navigable for boats and river steamers up to and beyond Chandernagor, but not for sea-going ships, even of small tonnage.

### (c) Railways

*Pondicherry Railway*.—A railway runs from Pondicherry to Villupuram, a junction on the South Indian Railway. The length of the line in French territory is 12.633 kilometres (7.85 miles) out of a total length of 24 miles. The gauge is 1 metre. For the construction of these 7.85 miles of railway, a concession was granted in 1878 to the Pondicherry Railway Company, with facilities for sub-concessions. The French Government gave a subsidy of 1,264,375 francs, in return for which the company pays one-half of the net profits to Government. On the expiry of the concession (June 18, 1978), the railway will become the property of the State.

Statistics of traffic are not available until 1903. In that year the number of whole-distance passengers

was 291,780; and the figures show a steady increase until 1909, when the number was 415,673. The figures for 1910 were slightly lower (409,826). The figures for passenger-kilometres increased from 2,865,369 in 1903 to 3,982,567 in 1910. The goods traffic has been much more variable. In 1903 the railway carried 91,317 tons of merchandise over the whole length of its line; in 1904, 1905, and 1906 there was a rapid decline, and the figures for 1906 are 54,535 tons. The years 1907-10 show a still more rapid recovery, and the railway carried 96,398 tons over its whole length in 1910. The figures in ton-kilometres vary from 954,302 in 1903 to 591,627 in 1906, and 1,223,080 in 1910.

*Capital and Income.*—Besides the issue of bonds to the amount of 1,264,375 francs for the Government subsidy, the Pondicherry Railway Company has a capital of £10,000 in £5 shares (£3 10s. paid up). The expenses of construction were 955,495 francs. The receipts, expenditure, and profits show considerable variations from year to year. From 1898 to 1902 the annual profits gradually increased from 11,115 francs to 24,412 francs, and rose to 73,910 francs in 1903. The decrease in goods traffic then brought about a reduction in the profits, which fell to 40,976 francs in 1906. The recovery was complete by 1910, when the total receipts were 162,733 francs, the total expenses 89,906 francs, and the profits 72,827 francs. In 1912, after the payment of one-half of the net profits to the Government, the company paid a dividend of 30 per cent. for the year, and carried over a balance of £825.

*Karikal.*—A railway, which is the property of the French Government but is worked by the South Indian Railway, runs from Karikal to Paralam, a distance of 23 kilometres (about  $14\frac{2}{3}$  miles). The agreement with the South Indian Railway Company is terminable at a year's notice. The expenses of con-

struction were 1,201,840 francs. The line was opened for traffic in 1898. The traffic returns show extraordinary variations :

	<i>Tons carried the whole distance.</i>	<i>Ton-kilo- metres.</i>
1903	56,464	617,899
1904	8,779	197,902
1905	11,603	185,789
1906	56,282	360,690
1907	12,439	243,545
1908	11,068	266,024
1909	13,551	411,767
1910	11,253	267,480

*Chandernagor* is served by the East Indian Railway, which has a station just outside the French territory. Similarly, *Mahé* is served by the line from Calicut to Cannanore, which passes close to it. *Yanaon* suffers from a lack of railway facilities.

Proposals to develop the railway system in French India have frequently been made. The favourite project has been a coast line from Pondicherry to Cuddalore, *via* Bahour. It has been under the consideration of the French Government for the last quarter of a century. The scheme was abandoned in 1897, but revived in 1904; in 1905 it was sanctioned by the Senate, and funds were voted. The railway has, however, not been built. The cost of construction would be very considerable, and it seems to be generally agreed that there would be very little goods traffic on a line from Pondicherry to Cuddalore. There are difficulties of loading at Cuddalore, and there has been a tendency to transfer traffic from Cuddalore to Négapatam.

#### (d) *Posts and Telegraphs*

The postal service is organized in accordance with a convention between the French and British Govern-

ments. The telegraphic service is entirely in the control of the Government of British India, and is part of the Indian telegraphic system. Until 1906, telegrams from Pondicherry to Cuddalore were sent *via* Madras, but there is now a direct connexion. No wireless installation is known to exist.

## (2) EXTERNAL

### (a) Ports

#### (i) Accommodation, &c.

*Pondicherry* has no real harbour. In the dry season the Gingee is cut off from the sea, and becomes an unhealthy marsh. An iron screw-pile pier for landing and discharging cargo extends about 1,090 ft. seawards from near the lighthouse. Ships' boats can land at it during the fine season, and it is connected by rail with the Pondicherry railway station, so that wagons can be loaded and unloaded on the pier and the adjacent foreshore. The pier has been extended and improved in the last few years. The open roadstead is described as being one of the best on the coast, and as being superior to that of Madras in lying to windward for the larger portion of the year, in having less surf, and in possessing a river. The general anchorage is in from six to seven fathoms of water; but from October to December, when bad weather may be expected, it is desirable to anchor about half a mile farther out in eight to nine fathoms. The two roadsteads are known as 'la petite rade' and 'la grande rade'. Landing in ships' boats is not possible except at the pier in fine weather.

*Karikal*.—The town of Karikal is more than a mile inland. The rivers in the vicinity are all barred streams; but, after the rains, flat-bottomed boats, of which there is a well-organized service, can be used

to land cargo. Lading and unloading is carried on with little difficulty in the Arasalar river, but the bar is very dangerous in October, November, and December. A proposal for improving the bar of the Tiroumalara-janar, one of the numerous branches of the Cauveri, by building a bridge with regulating sluices at Manamutty, has recently been approved by the French and British Governments. There is a good anchorage at Karikal, in from five to six fathoms of water.

*Yanaon.*—There is no port or anchorage at Yanaon. The territory lies at the bifurcation of the rivers Godavari and Coringa, and extends along their banks, but the mouths of both rivers are obstructed by sandbanks. The Coringa, however, has a deep bed which, at spring tides, admits vessels of 200 tons.

*Mahé.*—The town is on the south side of the Mahé river mouth; and the French territory extends along the beach in a southerly direction for a little over half a mile, and in a northerly direction to the middle of the river. Rocks extend out from both sides of the river entrance as far as the two-fathoms contour line. During the dry season, the channel leading into the river is near the south bank, and does not exceed 20 yds. in width. The bar is dangerous except in smooth water. There is a harbour available for small native craft familiar with the locality. The anchorage is in five fathoms, about  $2\frac{1}{4}$  miles from the shore.

*Chandernagor.*—Direct communication with the sea is forbidden by the treaty which regulates the relations of the French establishments to British India.

### (ii) *Adequacy to economic needs*

There can be no question about the inadequacy of the shipping facilities of the French settlements in India. The absence of a satisfactory port for French India has frequently been deplored by French writers;

and proposals have been made for improvements at Mahé, Karikal, and Pondicherry. The most important suggestion is the construction of a new port at Pondicherry, at the mouth of the Ariancoupom, where it is protected by the Île des Cocotiers. M. Henri Deloncle, writing in M. Rambaud's *La France Coloniale* (1893), asserts that the construction of this harbour would make Pondicherry one of the greatest commercial centres in India, and that the technical difficulties are not serious, being only of a kind which has not prevented the success of similar enterprises at Colombo and Madras. He says :

From the rice of the [Coromandel] coast to the cotton of Tinnevely in the south of the peninsula, all products for exportation would converge to the one point in [the bay of] Bengal where the goods could be embarked from a quay at any season of the year. Madras and Calcutta would compete in conditions of insurmountable inferiority. It has been calculated that in ten years the cost would be covered by the dues ; and the dues would not be burdensome, because the construction of quays would reduce the expenses of carriage and of boat-hire, and would diminish the waste that is unavoidable in connexion with the chelingues [small flat-bottomed boats]. Further, the rapidity of loading at a quay would lessen, by a half or two-thirds, the time spent in loading and unloading ; and freights would consequently fall about 10 to 15 per cent.

No ambitious scheme of this character has got beyond the stage of general discussion ; the improvements made in recent years have been very slight, and the whole system is still dependent upon the primitive device of surf-boats. The British Consular Report for 1903 referred to the need of steam-tugs and lighters, but these have not been supplied.

### (b) *Shipping Lines.*

The British India Steam Navigation Co.'s steamers sailing between Madras and Negapatam provide a weekly service to Pondicherry, and their steamers sailing between Bombay and Calcutta a fortnightly



service. The Asiatic Steam Navigation Co. and the Messageries Maritimes also have a regular service to Pondicherry, and the British India Steam Navigation Co. and the Asiatic Steam Navigation Co. to Karikal. The Clan, City, and other lines send steamers, as required, for the ground-nut trade. These lines provide communication with the French colonies of Réunion, Mayotte, Madagascar, and Indo-China, and also with the Straits Settlements (Penang and Singapore), British India, Ceylon, and European ports. The coasting trade from Pondicherry, which was almost entirely controlled by the British India Steam Navigation Co., has become nearly extinct, owing to the competition of the railways, which provide better and cheaper facilities, and tap all the coasting ports.

*Tonnage.*—In 1911, 1912, and 1913, the numbers of steam vessels of all nationalities engaged in foreign trade which entered the port of Pondicherry were, respectively, 212, 219, and 195. The effect of the war is seen in the reduction of the number in 1914 to 147. The tonnage figures for the four years are, respectively, 542,192, 574,615, 429,815, and 394,794. The average tonnage of vessels entering and clearing Pondicherry has not varied greatly in the last twenty-five years. An overwhelming proportion of these vessels were of British nationality—169 in 1911, 175 in 1912, 154 in 1913, and 111 in 1914, with tonnages 456,377, 484,818, 350,677, and 320,695 respectively. The figures for French vessels for the four years are : 1911, 28 vessels (43,309 tons) ; 1912, 26 vessels (37,544 tons) ; 1913, 26 vessels (39,110 tons) ; 1914, 25 vessels (45,480 tons). Two German vessels entered Pondicherry in each of the years 1911–13 and one in 1914 (tonnage 6,940, 6,435, 6,245, and 2,121 respectively). The numbers for Austro-Hungarian vessels were : 1911, 2 (tonnage, 5,579) ; 1912, 4 (tonnage, 10,915) ; 1913, 5 (tonnage,

14,816); and 1914, 2 (tonnage, 5,586). Other nationalities represented in the list of steamers entering are Greece, Italy, Holland, Denmark, Russia, and Norway.

The foreign trade of Karikal is dependent upon British lines. In 1912, 102 British vessels (tonnage, 200,398) entered and cleared; in 1913, 107 (tonnage, 196,051); in 1914, 98 (tonnage, 154,160).

## (B) INDUSTRY

### (1) LABOUR

The inhabitants are as a rule frugal, polite, patient, and hard-working. Their manners are simple; they work assiduously in the fields, and have taken readily to the new industries introduced into the country. They have good memories; their leading faults are lust and mendacity, and their reputation for cleanliness is not great.

The principal emigration is that of coolies from the colony going to the French colonies of Réunion and the Antilles. The regulation of this is organized under a convention concluded with England in 1861. Official agents of the French Government superintend the recruiting and dispatch of the coolies to their destination and their eventual repatriation at the termination of their contracts.

### (2) AGRICULTURE

#### (a) *Products of commercial value*

*Pondicherry*.—The flora is extremely varied, and the land, being alluvial, is very fertile and suited to bearing a great number of crops. The chief authorities have not differentiated the products of the separate territories, so that the list given here may be taken as that of the French Indian establishments generally rather than of Pondicherry in particular.

The timber-trees include teak, sandal-wood, aloe-wood or calambac, and iron-wood. There is a large variety of fruit-trees, including coco-nuts, bananas, pomegranates, mangoes, guavas, tamarinds, dates, oranges, and citrons. These trees are only partially included in statistics of land under cultivation (about 4,250 acres in the Pondicherry district). The most important is the coco-nut tree, which is often grown on the margins of cultivated lands and on the borders of roads and canals. The roads leading out of Pondicherry, and especially the road to Villenour, are richly lined with coco-nut trees, tamarind trees, tulip trees, and acacias. The areca or betel-nut palm, which yields the betel or areca nut of commerce, is also grown in the Pondicherry and Karikal districts. The nut, mixed with lime and the leaf of the piper betel, is in very wide use as a masticatory. It is also employed for medicinal purposes; and a strong decoction of the nut is used in dyeing.

Infinitely more valuable than all the trees of the district is the *Arachis hypogæa*, a shrub somewhat similar in appearance to the dwarf garden pea, but more bushy. It produces the ground-nuts, which, when pressed, yield an oil which is used for the same purposes as olive and almond oil. The nuts are exported in large quantities to France, where the product is sold and exported as olive oil. The French are successful in treating ground-nut oil so as to make it indistinguishable from olive oil. In India, it is also used for lamps, and yields a more brilliant and more durable light than an equal quantity of olive oil. The leaf is used as food for cattle. The growth of the ground-nut industry, which developed about 1877, has brought into use large tracts of sandy desert. On average land the yield of ground-nuts is from 1,500 to 1,600 kilos (about  $1\frac{1}{2}$  tons) of unshelled nuts per acre, producing

from 800 to 1,000 kilos (16 cwt. to 1 ton) of clean kernels.

The chief products of the soil are rice, peas, lentils, vetches, onions, and other vegetables, betel, indigo, sugar-cane, bananas, and other fruits, coco-nuts, ground-nuts, and oleaginous grains. There is also a small cultivation of tobacco and cotton. Gums are obtained from the *Acacia arabica*, spices from the white pepper, cinnamon, and cloves. Spirits are derived from sago; and arrack and *callou* are distilled from the coco-nut. Rice furnishes the fundamental food of the inhabitants; there are thirty varieties, of which the most esteemed is *samba*. Among other crops are castor-oil plant, sesame, *bajra* millet, and the opium poppy. Bamboo is found generally through the territories. European vegetables grow as well as tropical.

Agricultural conditions are influenced by the circumstance that the territory of Pondicherry is as a rule only slightly above sea-level; the territory of Karikal and Yanaon never rises beyond 33 ft.; the territory of Mahé rises to 165 ft. The area under cultivation is between a half and two-thirds of the whole; it varies from year to year with climatic conditions and with the demand for individual products. When the rains are favourable, there is a small increase in the total cultivated acreage; and rice and vegetables (and, since the outbreak of war, indigo) are grown on lands which in bad years are used for less important products. Land which is completely irrigated (i. e. about three-fifths of the total land under cultivation) is largely used for rice. Twenty years ago, nearly half (in the Karikal district, nine-tenths) of the cultivated land was devoted to rice, but this proportion has greatly decreased. In the four communes of Pondicherry, between 1909 and 1913, about a quarter of the land under cultivation was used for rice, and over a third for peas, lentils,

and other vegetables. The most productive crops (in weight of produce per acre) are indigo, vegetables, rice (*nelly*), small grains, and tobacco; the least productive are cotton, sugar-cane, and betel.

The fauna is not extensive and has no very special characteristics. The white ant does great destruction among the crops, especially in Mahé. Of domestic animals horses are rare; oxen are used for nearly all purposes of transport.

*Karikal*.—For the general description, see under Pondicherry (pp. 29–32). Rice is grown extensively, and coco-nuts on the higher ground. Cotton grows wild, but is not cultivated. Indigo and ground-nuts could be developed. No sugar, coffee, cocoa, tea, or tobacco is grown; they would demand too much care and expense. In the seventy years between 1824 and 1894 the ground under cultivation increased from 22,540 acres to 24,827 acres.

There is practically no pasture in the territory. Oxen for work are imported from British India. In 1897 the census of the chief domestic animals was as follows:

Oxen	.	.	.	.	.	14,460
Buffaloes	.	.	.	.	.	10,035
Sheep	.	.	.	.	.	6,500
Goats	.	.	.	.	.	9,840

The skins and horns of animals slaughtered are sold to be worked in the province of Mazavaram.

*Yanaon*.—The principal crop is rice, but the land is cultivated much less than it was. The number of acres cultivated in 1850 was 3,582, in 1860 3,891, in 1870 4,312, but in 1900 only 1,537.

About 2,370 acres are devoted to stock-raising. There are in the country about 1,500 head (oxen, buffaloes, cows, and sheep).

*Mahé*.—About 3,630 acres are devoted to rice, but not enough is produced for the inhabitants, who have to import for their needs. About 9,850 acres are devoted

to fruit-trees, of which the coco-nut is most important, others cultivated being the areca, banana, and latania. Cotton, sago, vanilla, and cocoa are planted to some extent. The soil of the four *aldées* is extremely fertile. Pepper is planted at the foot of the fruit-trees. There are magnificent specimens of the *Caryota urens* (sago-palm), which furnishes an inferior kind of sago. No ground is specially set apart for pasturage.

*Chandernagor*.—The land is full of trees, the chief being coco-nut palm, date-palm, areca, and various fruit-trees. There is a large quantity of bamboo.

### (b) *Irrigation*

The plains in the Pondicherry district are covered with an immense number of tanks, which are filled as the streams come down from the hills in flood. The superfluous water is thus utilized before it can reach the coast; and, except for a flood which invariably occurs at the end of October, flooding is rare. The tanks are not placed on any marked drainage line, but on ordinary sloping ground. They are made in V shape, the point of the V being down the line of the slope and the arms inclining up the slope. The water in the tanks is sufficient not only for purposes of irrigation but also for maintaining the level of wells, so that they are available when the rivers are dry. The Ponnaiyar and the Gingee rivers are the principal drainage lines of the Pondicherry district. The Ponnaiyar is 400–500 metres wide, and the discharge varies from zero to 3,655 cubic metres in flood. The land between the Ponnaiyar and the Maltar is irrigated by water-courses from the Ponnaiyar. There is an elaborate system of artesian wells in the alluvial deposits near the coast. Boring was begun in 1877, and has been continued successfully ever since. The water is drinkable, and is excellent for industrial and

agricultural purposes. For many years it was supplied only to the European town; but a new waterworks scheme, completed about 1913, now ensures a good water-supply to all parts of Pondicherry.

Karikal has an inadequate system of irrigation from the deltaic streams of the Cauveri; and there are also artesian wells in the district which supply drinking water. A new water-supply is being provided for the town by the construction of a reservoir and hydraulic pumping station on the River Arasalar, at a village about seven miles from Karikal.

Yanaon receives a gratuitous supply of water for purposes of irrigation from a British canal.

The whole system of irrigation in French India is antiquated and inadequate. The complexity of the geographical situation of these enclaves no doubt adds to the difficulties of the situation. The French Governor, in a public speech in 1898, insisted on the necessity of new irrigation works; and the British Consular Report for 1904 mentions that in the drought of that year the tanks in the Pondicherry district were almost all dry. Sir George Forrest, in his *Cities of India*, calls attention to the fact that the water-buckets are still raised by men working with their feet—the system described in the Pentateuch as existing in Egypt, ‘where thou wateredst it with thy foot’.

### (c) *Forestry*

No figures are available for the area devoted to the bushes and trees which yield some of the most valuable products of the French colonies in India.

*(d) Land-tenure*

The French Government originally considered that it had succeeded to the proprietary rights of the 'indigenous sovereigns' in the land, and that the domain of the State covered the whole area of French territory in India. It did not admit the existence of individual property, but only of individual possession, enjoyed by privilege, and subject, under penalty of eviction, to certain obligations. A second series of possessory rights was admitted in the case of what are known as *aldées de concession*—lands, the dues payable from which had been granted to individuals by concessions made between 1785 and 1788. In 1854 the French Government renounced its proprietary rights in lands rented and cultivated by natives, and acknowledged the ownership of the actual occupiers, whatever their title, provided that they continued to pay the regulation taxes. Failure to meet this obligation may involve the forfeiture both of the products and of the land itself, but, apart from this condition, the definite ownership of the land by the cultivator has been admitted since 1854, and the change has been beneficial to the agricultural development of the colonies. An attempt made in 1893 to commute the privileges held by individuals in the *aldées de concession* was unsuccessful, and the imposts on these lands are still payable to the holders of the concessions.

Transfers of property are made in accordance with French law, and sales of land are invalid without an official registration.

*Public Works.*—The State retains the ownership of all military works and buildings, and has the right of taking, without the payment of an indemnity, land necessary for irrigation, the construction of canals, or other works of public utility.



### (3) FISHERIES

There are fisheries at Pondicherry, Karikal, Chander-nagor, and Mahé. No figures are available with regard to them except those which are given under Exports (p. 44).

### (4) MINERALS

A large deposit of lignite which was discovered at Bahour in 1882 extends to Arranganour (3 kilometres east of Bahour) and Javalacoupom (8 kilometres north-east of Bahour), and consists of a compact mass occupying about 4,000 hectares (roughly 10,000 acres), and estimated to contain some 250,000,000 tons. The calorific power is only 0.66 of that of Cardiff coal, and it is therefore of little value for export, but it is 1.52 of that of *filas* wood, the best local combustible. A company was formed to work the deposit, the products of which find a market at Pondicherry.

The regulations with regard to mines were made by a decree of November 7, 1884, following the lines of the regulations made in 1883 for New Caledonia. By that decree, the Council of Mines can authorize borings without the consent of the proprietor of the land. A proprietor can prospect on notifying the authorities. In either case, there is a tax of 40 centimes per hectare. Concessions on Government land are granted by the Governor in Council after consultation with the Council of Mines. The tax is 50 centimes per hectare. The regulations are of little importance, as the only mines are the lignite deposits above-mentioned.

### (5) MANUFACTURES

*Textile and Chemical.*—The principal industries at Pondicherry are cotton-spinning and mechanical weaving. The establishment of mills for cotton-spinning

was the result of suggestions made by the Governor of Pondicherry between 1826 and 1828. The manufacture was successful for many years, but the competition of British and Belgian cloths in the market of Senegal dealt a very serious blow to it, and for some years after 1873 the three spinning mills were all closed. The French Government then offered bounties for the export of the cotton fabrics dyed blue with indigo, known as *guinées*, which are the principal products of the mills ; and there has been a remarkable development in recent years. In 1893 there were three mills, with some 20,000 spindles, under the management of the *Société Savana* ; in 1906 a fourth mill had been established ; and in 1913 there were five mills with 71,233 spindles and 1,622 weaving frames, employing 6,190 inside workers and 1,189 outside workers. There are several indigo manufactories and dyeworks, chiefly connected with the trade in *guinées* ; the water supplied to the town is believed to be specially suitable for the blue dye used for these fabrics. A quarter of a century ago there were about 100 indigo factories and some 50 dyeworks, but the demand for indigo has been greatly diminished by the introduction of aniline dyes, which have not only destroyed the export trade, but were, before the war, imported for local use. Since 1914 there has been a temporary revival in the production of dyes from natural indigo. Pondicherry also possesses two well-equipped ironworks and foundries, some oilworks, tanneries, and brickworks, and a distillery. The distillery makes very cheap liquor, and the Government of Madras has, in consequence, found it necessary to create a low-duty area for arrack all round the French settlements ; the liquor made in this area is slightly coloured as a check upon its introduction beyond the bounds prescribed for the lower duty. In this way it has been possible to arrest a decline of

British revenue which was noticeable about 1897-8. The oil industry has decayed in the last forty years, owing to competition with the Malabar coast and Ceylon; but, until about 1877, the commerce of Pondicherry was chiefly in indigo and coco-nut oil.

Among other industrial establishments are a bone-mill, an ice-factory, and a factory for the manufacture of cocotine, a substitute for *ghi*.

*Native Industries.*—The native population engage in a large number of industries, including the manufacture of palm juice and its products, crude wax, mats, baskets, ropes, glass, nautical fittings, sailcloth, children's toys, soaps, jute cloth, *guinées*, &c., and of articles made from tortoise-shell, the horns of the zebu and buffalo, and mother-of-pearl. Hand-weaving has largely died out, but the Patnulkarans, a Gujarati caste of weavers, still make a zephyr fabric, which is used locally, and is also exported to Singapore.

Indian families in Pondicherry make pottery, which is exported by little vessels (called *dhonys*) to Singapore, Colombo, and the Straits. In the villages of Moutalpett and Nellitope Indians make good loin-cloths of silk and cotton. They are clever also at goldsmith's work, iron-work, jewels, and embroidery. Lace and embroidery are made by Hindu and Creole girls under the superintendence of the Sisters of St. Joseph of Cluny.

The principal manufactures of Karikal are bricks and pottery, both on a small scale. Since 1907, Karikal has been a petroleum depot of the Standard Oil Co., which obtained a concession for the construction of oil tanks in that year.

The industries of Mahé, which is a decaying town, are of no economic importance. Chandernagor is a pleasant residential town. The *loges* (see above, p. 2) are of political rather than commercial value.

## (C) COMMERCE

## (1) DOMESTIC

The area is so small that the domestic commerce is very insignificant; and no figures are available. A large proportion of the products of the soil is consumed in the district. The only markets are the towns of Pondicherry, Karikal, Yanaon, Mahé, and Chander-nagor. A Chamber of Commerce was established in 1879 at Pondicherry, which is the only market of any importance in French India. The Chamber is elected by the leading merchants. The commerce is very largely in the hands of French houses, many of them of old standing. The bank is the French Bank of Indo-China. The most important foreign companies are the British India Steam Navigation Co. and the Standard Oil Co.

## (2) FOREIGN

Two sets of figures are available for the foreign trade of the French colonies in India—the French official returns and the British official statistics of Indian sea-borne trade. The French figures are in francs, and relate to calendar years; the British figures are given, at different periods, in francs, in rupees, and in pounds sterling, and are for the Indian financial year (April 1–March 31). When allowances are made for these differences, a comparison shows that in some years the two sets of figures are approximately the same, but that in others there are large variations. The totals of the two sets of figures for nineteen years—British from 1895–96 to 1913–14, and French from 1895 to 1913—differ by, in round numbers, £753,000 out of £23,500,000. The discrepancy is very largely traceable to the years when the British figures are given

in rupees. It must be remembered that three months of 1895 are included in the French figures and not in the British, and that three months of 1914 are included in the British figures and not in the French. The returns may be taken as approximately correct, but their significance is diminished by the absence of any figures for imports or exports by land. These have greatly increased in recent years, but no statistics are available except the returns of goods traffic on the Pondicherry railway.

The sea-borne trade of the French colonies in India has varied very considerably in the last sixty years :

<i>Year.</i>	<i>Total sea-borne trade of</i>
	<i>French India.</i>
	<i>Francs.</i>
1857	48,033,060
1860	32,313,940
1870	19,085,332
1880	33,411,714
1890	21,737,002
1895	18,406,163
1900	14,743,370
1903	37,378,613
1905	33,542,204
1909	39,874,352
1910	45,842,544
1911	46,156,588
1912	46,249,989
1913	54,557,240
1914	41,849,140
1915	27,342,548

The French colonies in India had a very prosperous period about 1857-8. The years from 1860 to 1871 witnessed a decrease in trade, owing to the competition of Ceylon and the Malabar coast; this ruined the export of coco-nut oil, which had represented a large proportion of the trade of Pondicherry. From 1872 the prosperity of the colonies began to revive, and the

development of the trade in ground-nuts led to a recovery. Another period of bad trade began about 1890, and continued, with some variations, until 1900. The years 1901-4 were prosperous ; there was a slight decline in 1905, 1906, and 1907, and from 1908 to 1914 the colonies participated in the general expansion of Indian sea-borne trade and had a larger foreign trade than at any other time in their history. The increase was very marked in the year before the outbreak of war, and is attributable to prices obtained, for it is not reflected either in the quantities exported or in the tonnage figures. The value of sea-borne trade in 1913 exceeded that of 1912 by 8,307,251 francs, but the total of tonnage entering and clearing in 1913 was less than that of 1912 by 297,039 tons. The price of ground-nuts, the most important export, was very high in 1913.

The sea-borne trade of the French establishments in India shows a very large excess of exports over imports :

	<i>Imports.</i>	<i>Exports.</i>
	<i>(Value in francs.)</i>	<i>(Value in francs.)</i>
1860	6,318,235	25,995,705
1870	5,253,409	13,831,923
1880	7,970,068	25,441,646
1890	4,637,956	17,099,046
1900	4,029,536	10,713,834
1905	6,356,207	27,185,997
1910	8,376,531	37,446,013
1911	8,618,302	37,988,286
1912	9,031,780	37,218,209
1913	10,837,115	43,720,095
1914	7,545,629	34,403,511

Average for the five years 1909-13 : imports, 9,281,358 francs ; exports, 37,344,778 francs.

This excess has always been characteristic of French India ; so long ago as 1716 the imports of the French

colonies in India were valued at 3,780,000 livres, and the exports at 6,868,000 livres. It is, in proportion, much greater than the excess of exports over imports in the foreign sea-borne trade of British India. The average for British India for the five years 1909-10 to 1913-14 shows an import value of £101,113,000, and an export value of £149,487,000 for merchandise (excluding treasure and gold). The proportion of imports to exports in French India for 1909-13 is, therefore, roughly 1 to 4, and in British India for 1909-10-1913-14 is, roughly, 2 to 3. The difference is, at all events in part, attributable to the modest standard of living which prevails among the French officials and merchants. The overplus of exports arises from foreign trade; in the rapidly decreasing coasting trade, the balance is sometimes the other way, e. g. in 1904-5, when the statistics of the coasting trade showed an import value of 3,374,436 francs, against exports of 1,349,480 francs. The figures of imports and exports for the coasting trade are very variable.

The figures of re-exports are insignificant. In 1914, of a total export valued at 34,303,511 francs, goods to the value of 48,025 francs were re-exported from the French colonies in India.

#### (a) *Exports*

*Quantities and Values.*—The most valuable export is that of *ground-nuts*. Between 1879, when the trade began to develop, and 1885, the export of ground-nuts increased from under 3,000,000 francs in value to about 14,000,000 francs. The value in 1913 was 29,269,170 francs, and the total quantity exported was 107,238 tons. The value in 1914 was 23,909,514 francs. The export is made in two forms, (a) stripped nuts and (b) nuts in husks. The price per ton of stripped

ground-nuts is about 25 per cent. higher than is obtained for unshelled nuts, but the latter, owing to their bulk, have generally to pay almost double freight. The proportion of nuts exported in shells depends largely upon the supply of decorticating machines, which has sometimes been quite insufficient to keep pace with the expansion of the trade. The average number of tons of ground-nuts in husks exported from Pondicherry in the five years 1909-13 was 9,667·5, but the numbers in individual years varied from 8·21 tons in 1909 to 18,890·72 tons in 1911. In 1913 the export value of ground-nuts in husks was 2·5 per cent. of the total, but a supply of decorticating machines, manufactured locally, reduced the proportion in 1914 to 0·9 per cent. of the total. The price of ground-nuts varies very considerably from year to year. In the years 1909-13 the price of stripped ground-nuts varied from 30 to 40 rupees per French candy of 240 kilogrammes (i. e. from 8s. 4d. to 11s. 1½d. per cwt.). In the beginning of 1914 it was 52s. per candy, and in the end of the year fell rapidly,<sup>1</sup> after the outbreak of war, to 26s. 8d. per candy (about 5s. 7d. per cwt.). Pondicherry is now a great emporium for ground-nuts, grown not only in French but also in British India, and especially in Tanjore. Special facilities in connexion with ground-nuts are given for the Pondicherry market by the Bank of Indo-China; and commercial houses in French Indo-China prefer Pondicherry to British ports.

Next in importance to ground-nuts is the export of *cotton fabrics*, the value of which was 7,165,720 francs in 1906, 7,341,367 francs in 1913, and 6,365,182 francs

<sup>1</sup> This remarkable fall in the price of ground-nuts after the outbreak of war was peculiar to Pondicherry, which relies mainly on the French market. The price in British India fell only from 11s. 8½d. per cwt. in 1913-14 to 11s. 0½d. in 1914-15.



in 1914. The quantity exported in 1913 amounted to 2,412,915 kilogrammes (over 2,412 tons). The average number of bales exported from Pondicherry in the five years 1909-13 was 8,175 bales of *guinées* (dyed fabrics) and 5,164 bales of other cotton fabrics. The export of cotton fabrics has remained approximately constant in the last decade. The figures for the export of *cotton thread* have been more variable, falling, for example, from a value of 2,685,360 francs in 1906 to 617,507 francs in 1907, owing partly to Japanese competition in the East, and partly to the growth of transit by land. But more recent years have shown a recovery; the value was 2,318,860 francs in 1913, 1,654,560 francs in 1914, and in 1915 cotton thread was an exception to the general decline, and increased in value to 2,549,250 francs. The quantity exported in 1913 was 1,017 tons.

The exports of ground-nuts and cotton fabrics are made almost entirely from Pondicherry, those from Karikal being insignificant. Two other important exports—*rice* and *fish*—are made from both ports, and there is a small export of fish from Mahé and Chandernagore. The export of rice has increased in value from 7,619 francs in 1906 and 10,266 francs in 1907 to 1,848,053 francs in 1913, and 1,232,266 francs in 1914; it is made chiefly from Karikal, which exported an average of 7,132 bags in the years 1909-13, against an average of 63 from Pondicherry. The quantity of rice exported from French India in 1913 was 6,981 tons. The export of salt fish rose in value from 24,018 francs in 1906 to 104,208 francs in 1907, owing to a large demand from Colombo and the Straits Settlements. The value in 1913 was 80,149 francs, and the quantity 356 tons. The average number of bags of dried fish exported from Pondicherry in 1909-13 was 959, and from Karikal 144. The figures for

the export of fish vary considerably from year to year.

*Bone-powder*, for chemical manure, rose in value from 34,935 francs in 1906 to 78,672 francs in 1907, owing to the establishment of a new bone-works factory, and had a value of 101,926 francs in 1913 and 180,117 francs in 1914. The quantity exported in 1913 was 721 tons. A larger demand for *cocotine* (a substitute for *ghi*) in Indian markets increased the value of this export from 12,024 francs in 1906 to 37,241 francs in 1913. In 1913, 41 tons of *cocotine* were exported. The Karikal export of *pottery* increased from 2,872 francs in 1906 to 11,733 francs in 1907, owing to a demand in Ceylon, and reached a value of 19,542 francs in 1913. The average number of articles of earthenware exported from Karikal in 1909-13 was 230,864.

*Ground-nut oil*, which in 1907 had a value of 285,703 francs, had fallen by 1913 to 25,814 francs; and ground-nut oilcakes, which had a value of 980,956 francs in 1906 and 600,922 francs in 1907, had decreased to 125,226 francs in 1913. The explanation of the decline is stated by the French Colonial Office to be the difficulty of transport to Pondicherry from the localities of production. There is a similar decline in *oil of sesame*, the export of which increased from 54,998 francs in 1906 to 97,059 francs in 1907, owing to a demand in the Straits Settlements, and had fallen to 23,324 francs in 1913, and in sesame oilcake (52,370 francs in 1907 and 5,102 francs in 1913). The export of *indigo*, the value of which was 25,008 francs in 1906, rose, owing to a sudden demand in European markets, to 53,732 francs in 1907 (when an opportunity occurred for getting rid of old stocks), but fell to 2,834 francs in 1913. The export of *skins and hides*, the value of which fell in

1907 to about half of the figures (2,313,937 francs) for 1906, owing to financial crises in Europe and America, has not recovered. The value for 1913 was 976,201 francs. The average number of bales of hides exported from Pondicherry in 1909-13 was 494.

There are small exports of coco-nuts (the transit of which is largely effected by land), tamarinds, onions, tannin, and dyes, castor oil, coco-nut oil, chillies, coffee, coriander, *gingili*, and metal work. The last mentioned is a developing industry, and the export in 1915 reached a value of 170,832 francs.

*Countries of Destination.*—In 1887, of a total export value of 21,416,214 francs, goods to the value of 10,427,760 francs were destined for France, and to the value of 664,476 francs for the French colonies; in 1904, of a total export value of £1,102,000, goods to the value of £435,000 were destined for France and the French colonies. The figures for 1913 and 1914 are as follows :

	Total value of exports.	To France.	To French colonies.	To other destinations.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1913	43,720,095	27,487,768	2,818,372	13,413,955
1914	34,303,511	22,953,256	2,575,893	8,774,362

The exports to French destinations were, therefore, over one-half in 1887, considerably under one-half in 1904, over two-thirds in 1913, and over three-quarters in 1914. This large proportion of French trade depends upon the tendency of French ports to absorb the two staple products of the French colonies in India. In 1913, of a total export of 107,238 tons of ground-nuts, 88,792 tons were destined for France; and, in the same year, of 2,412,915 kilogrammes of cotton fabrics exported, 1,590,915 kilogrammes were destined for France and French possessions. The value of these quantities of ground-nuts (24,304,130 francs) and of

cotton fabrics (4,018,704 francs) amounts to 28,322,834 francs out of the total export value of 30,306,140 francs to French destinations. The most important items in the remaining 1,983,306 francs of goods exported to France and French colonies in 1913 are 465 tons of bone powder (value 60,384 francs) and skins and hides (value 881,021 francs) to France, and the whole export of cocotine (value 37,241 francs) and liquors (value 36,721 francs) to the French colonies. The liquors were imported from France and re-exported to other French colonies.

Apart from French destinations, the export trade of French India is almost entirely with Great Britain and the British colonies. Of the non-French exports, valued at 13,413,955 francs in 1913 and 8,774,362 francs in 1914, over 10,750,000 francs in 1913 and the whole amount (with the trivial exception of 712,038 francs) in 1914 represent trade with the British Empire. The exports to Great Britain are small; in 1913 they amounted to 62,970 francs, of which 43,272 francs represent 17 tons of cotton. There has hitherto been no market for French ground-nuts in Great Britain, but just before the outbreak of war efforts were made in this direction, and trial shipments were made to Liverpool and Hull. British colonies in 1913 imported from French India 8,634 tons of ground-nuts (value 2,380,568 francs); 803 tons of cotton fabrics (value 3,273,379 francs); the whole export of rice (6,981 tons, value 1,848,053 francs); the whole export of dried fish (356 tons, value 80,149 francs); 607 tons of cotton thread (value 1,356,331 francs); 269 cattle (value 72,626 francs), and other smaller imports.

Germany in 1913 imported from French India 2,515 tons of ground-nuts (value 676,184 francs), and manufactured goods to the value of 7,665 francs; Italy, 6,274 tons of ground-nuts (value 1,636,776 francs);

and Belgium, 1,023 tons of ground-nuts (value 271,512 francs), and manufactured goods to the value of 4,750 francs.

(b) *Imports*

*Quantities and Values.*—The imports, as has been said, are of much less importance than the exports; the average value of imports in 1909–13 was about one-quarter of the exports. The largest branches of import trade are in cotton, areca nuts, and petroleum, which in 1914 accounted for 4,869,196 francs out of a total import value of 7,545,629 francs. The value of the import of cotton in 1914 was 2,116,472 francs; the import is practically confined to Pondicherry, which received in the years 1909–13 an average number of 10,480 bales of cotton per annum. Areca nuts to the value of 1,741,809 francs were imported in 1914; the average number of tons imported into Pondicherry in 1909–13 was 479·8, and into Karikal 1,986. The import of petroleum is confined to Karikal, which is a depot for the surrounding districts. The Standard Oil Company stores large quantities of petrol at Karikal. The value of the petrol imported at Karikal in 1914 was 1,010,915 francs, and the average number of gallons imported in 1909–13 was 1,280,175. Smaller imports include wines, spirits, and other liquors (value in 1913, 352,470 francs); coal (value in 1914, 112,500 francs); cotton thread (value in 1914, 333,283 francs); jute bags (value in 1914, 489,114 francs), and grain (value in 1914, 189,685 francs).

*Countries of Origin.*—Unlike the export trade, a very large proportion of the import trade is with the British Empire, and a small proportion with France and French possessions. In 1887, of a total import value of 5,945,459 francs, goods to the value of 577,681

francs were imported from France, and to the value of 440,391 francs from French colonies. In 1913, of a total import value of 10,837,115 francs, goods to the value of 8,903,611 francs were imported from the British Empire; in 1914 the figures were, respectively, 7,545,629 francs (total) and 6,095,552 francs (goods from the British Empire). In 1913 goods were imported from France to the value of 414,772 francs (largely in articles of food and clothing); from the French colonies to the value of 71,451 francs (almost entirely vegetable products); from Germany to the value of 46,075 francs; from America to the value of 1,394,526 francs (chiefly oil); and from Belgium to the value of 6,680 francs (manufactured goods). The imports from the British Isles amounted to only 55,654 francs. The large imports from the British colonies consisted chiefly in vegetable products to the value of 6,821,477 francs (including 1,547,599 francs for areca nuts and 874,867 francs for grain), and in manufactured goods to the value of 1,491,589 francs.

The imports from Germany in 1913 were cheese, synthetic indigo, wine, brandy, rum, gin, hollands, beer, whisky, salt of magnesia, and pack-thread. Two-thirds of the total consists of synthetic indigo (the value being 30,627 francs). These figures do not, of course, include German goods which reach the French colonies by land from British India; for these no statistics are available, but a statement of German and Austrian imports in French colonies (*Bulletin de l'Office Colonial*, February 1915) states that they consist of small quantities of glass, crockery, cutlery, and rubber.

The foreign trade is almost entirely at Pondicherry, which, as has been said, is the only real market. The trade at Karikal is about one-ninth of the total sea-borne trade, and the trade at Yanaon and at Mahé is insignificant.

*Customs and Tariffs.*—Pondicherry is, with certain exceptions, a free port. Port dues are very low, and are not payable by ships trading with India and Ceylon. There have been, for many years, customs duties on arrack, tobacco, and snuff, on rum manufactured to the east of the Cape of Good Hope or in the Antilles, and on liquors distilled from coco-nuts, palms, sugar-cane, and rice. In 1904 a small duty was levied on all wines and spirits entering Pondicherry, but it has not affected the quantities imported. The customs and tariffs at Karikal, Yanaon, and Mahé are similar to those in force at Pondicherry. All articles of export and import trade passing by land from British India to French India are liable to duties on the scale of the province in which the French establishments lie; but, by a convention of 1817, all live stock and provisions actually required for consumption by the French inhabitants are allowed to pass the frontier duty free. Grain grown in British India for export to the British Empire is free of duty at Pondicherry, and considerable amounts of such grain are exported. Goods originating in the French establishments in India are given a preference by the import tariff in France. In 1901 the Government of British India consented, on certain conditions, that postal packages for Pondicherry, forwarded by steamer from the French colonies *via* Cuddalore, might pass through British territory without being inspected or paying customs duties.

### (c) *Commercial Treaties*

In 1815 a convention between Great Britain and France regulated the supply of salt, opium, and saltpetre to the French establishments in India. The right to purchase salt manufactured in French India was farmed to the British Government, the French retaining a quantity sufficient for domestic purposes.

In 1818 this convention was modified by an agreement by which the manufacture of salt in the French establishments ceased, and an annual sum of 4,000 star pagodas (Rs. 14,000) became payable to the French Government as an indemnification to the proprietors of salt pans. The British Government undertook to sell, at prime cost, to the French Government sufficient salt for domestic purposes in the French establishments, and the French Government agreed to re-sell this salt at the prices prevailing in the adjoining British territory. This convention is still in existence, but in 1839 the French settlement at Chandernagor renounced its right to a supply of salt in consideration of an annual payment of Rs. 20,000, and agreed to give every facility for the sale of British salt at Chandernagor and to assist the British Government in obtaining the proper revenue from salt. There is no duty payable on the import of salt into Chandernagor.

The convention of 1815 reserved to the French settlements a right of purchasing a quantity of opium at an average price. This right has been commuted for an annual payment of Rs. 3,000 and of an additional Rs. 2,000 for help in the suppression of smuggling. The production of opium and trade in opium are now forbidden in French India.

By the Treaty of 1815, French subjects are allowed to trade in British India, and arrangements were made for the mutual surrender of debtors. (See also Table on p. 16.)



## (D) FINANCE

## (1) PUBLIC FINANCE

The actual budget figures are not available for any year later than 1907. From 1899 to 1907 there was an annual excess of income over expenditure, varying from 10,103 fr. (£404) in 1899 to 216,788 fr. (£8,671) in 1902, except in 1905, when there was a deficit of 32,337 fr. (£1,293). The budget estimates for 1908 and 1909 were made to balance exactly. The figures for the years 1900–7 are as follows:

		£			£
1900.	Receipts	73,052.	1904.	Receipts	100,440.
	Expenses	72,648.		Expenses	95,869.
1901.	Receipts	93,672.	1905.	Receipts	99,527.
	Expenses	90,518.		Expenses	100,820.
1902.	Receipts	88,456.	1906.	Receipts	99,848.
	Expenses	79,784.		Expenses	98,252.
1903.	Receipts	91,270.	1907.	Receipts	105,177.
	Expenses	83,957.		Expenses	102,264.

The principal items under Income are Indirect and Direct Taxes. The product of Indirect Taxes increased steadily, except for a decrease in 1905, from £38,883 in 1900 to £65,715 in 1907. The estimate for 1909 was £62,966. Direct Taxes produce between £16,000 and £17,000 a year. From 1901 to 1907 the colony received a subvention, varying from £8,171 in 1901 to £1,966 in 1907. The estimated subvention for each of the years 1908 and 1909 was £9,917. On the expenditure side the principal items are the expenses of the administrative offices, the largest single item being for Education (£9,718 in 1901 and £11,491 (estimated) for 1909).

*Public Loans.*—A Government loan of £46,680 at 3½ per cent. was contracted in 1894 for the Paralamb-

Karikal railway, to be repaid in 1919; £23,634 had been repaid by the end of 1909. A further Government loan, of £2,960 at  $3\frac{4}{5}$  per cent., for the same purpose, was contracted in 1900, also to be repaid in 1919, and £1,257 had been repaid by the end of 1909. A Government loan of £175,200 was contracted in 1906 at  $3\frac{4}{5}$  per cent., repayable in 1932, for the construction of a railway from Tiroupapouliour to Pondicherry, the improvement of the port of Karikal, and the improvement of the water-supply at Pondicherry and Chander-nagor. Of this loan £16,512 had been repaid by the end of 1909. These moneys have all been borrowed from funds belonging to the French Government.

The municipalities of Pondicherry and of La Grande-Aldée (Karikal) have contracted loans of £2,560 and £450 respectively for local improvements; the rates of interest are respectively 5 per cent. and 4 per cent.

## (2) CURRENCY

The currency is in rupees. The value of the rupee used to be fixed annually, but in 1893 the Government of British India took steps to restrict the coinage in order to give the rupee a settled value, and from 1899 to 1914 it was, with very slight variations, equivalent to 1s. 4d. The rupee, as in British India, is divided into 16 annas, and each anna into 12 pies, but there is also a division in the French establishments into 8 *fanons* of 24 *caches* each. The value of money, other than the rupee and its subdivisions, is determined by weight.

## (3) BANKING

The Bank of Indo-China has the same privileges in French India as in Indo-China. It is authorized to issue bank-notes of small value for circulation in the

colony. The Pondicherry branch of the Bank of Indo-China is responsible, over the whole area of French India, for all banking operations, including discount and advances on assignment of crops and on the security of merchandise. It is under the supervision of the Colonial Secretary. The Bank of Madras is closely associated with the Bank of Indo-China in loan operations and other commercial business; and drafts are sent to France through the Bank of Madras.

### GENERAL OBSERVATIONS

The whole survey of economic and industrial conditions in the French establishments in India illustrates the insuperable difficulties arising from the geographical situation of these scattered territories. French proprietors hold small tongues of land; roads are often British, while the ditches which border on them are French; the irrigation of French soil frequently depends on a British lake; sometimes land is held by French and British owners by an arrangement which allots a number of twelfth parts to each nation; none of the larger lakes lies wholly in French territory; and even the sea-coast is not continuously in French possession, for the mouth of the Maltar River is British.

This condition of things makes the collection of customs and excise very difficult; it facilitates crime; and it puts a great obstacle in the way of proper irrigation. Moreover, the development of means of communication, both internal and external, and of industry and commerce must be hampered and retarded while these conditions remain.

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Most of Pondicherry is covered by the quarter-inch Degree sheet 58 M, Provisional Issue, 1915, and the whole by the old quarter-inch Atlas sheets ;

Karikal is covered by the quarter-inch Degree sheets 58 M and N, published in 1915 and 1916 ;

Mahé is covered by the quarter-inch Degree sheet 49 M, published in 1913, by the half-inch sheet 49 M, N.E., and by the one-inch sheets 49 M/9-10 ;

Yanaon is covered by the old quarter-inch Atlas sheet 94 ;

Chandernagor is covered by the quarter-inch Degree sheet 79 B.

An outline map on the scale 1 : 275,000 showing the French Possessions in India was issued by the Naval Staff Intelligence Division in connexion with this series.









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# FRENCH INDO-CHINA

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# TABLE OF CONTENTS

	PAGE
<b>I. GEOGRAPHY PHYSICAL AND POLITICAL</b>	
(1) Position and Frontiers . . . . .	1
(2) Surface, Coast, and River System	
Surface . . . . .	2
Coast . . . . .	3
River System . . . . .	4
(3) Climate . . . . .	6
(4) Sanitary Conditions . . . . .	7
(5) Race and Language . . . . .	7
(6) Population	
Distribution and Density . . . . .	8
Towns and Villages . . . . .	9
Movement . . . . .	10
<i>KWANG-CHOW-WAN</i> . . . . .	10
<b>II. POLITICAL HISTORY</b>	
Chronological Summary . . . . .	12
(1) FROM EARLY TIMES TO THE MIDDLE OF THE NINETEENTH CENTURY	
<i>CAMBODIA</i>	
Rise and Fall of the Khmer Power . . . . .	13
Appearance of the Western Nations . . . . .	13
Conflict between Siam and Annam in Cam- bodia . . . . .	14
<i>ANNAM, TONGKING, AND COCHIN-CHINA</i>	
Chinese and Annamese Rule in Annam and Tongking . . . . .	14
Formation of Cochin-China . . . . .	14
French Treaty of 1787 . . . . .	14
(2) FROM THE MIDDLE OF THE NINETEENTH CENTURY	
Franco-Spanish Treaty of 1862 . . . . .	15
Treaty with Cambodia, 1863 . . . . .	15
French Penetration of Tongking . . . . .	16

# TABLE OF CONTENTS

[No. 78]

	PAGE
Franco-Annamese Treaty of 1874 . . . . .	17
The Chinese Suzerainty of Annam . . . . .	18
French Conquest of Tongking . . . . .	18
Franco-Chinese Imbroglio, 1884-5 . . . . .	19
Pacification of Tongking . . . . .	20
French Disputes with Siam . . . . .	21
British Intervention and the Franco-British Declaration of 1896 . . . . .	22
Franco-Siamese Treaties of 1904 and 1907 . . . . .	23
 III. SOCIAL AND POLITICAL CONDITIONS	
(1) Religious . . . . .	24
(2) Political	
Government and Administration . . . . .	25
Justice . . . . .	27
Army and Police . . . . .	28
(3) Educational . . . . .	28
GENERAL OBSERVATIONS . . . . .	29
 IV. ECONOMIC CONDITIONS	
(A) MEANS OF COMMUNICATION	
(1) Internal . . . . .	30
(a) Roads and Paths . . . . .	30
(b) Rivers and Canals . . . . .	32
(c) Railways . . . . .	37
(d) Posts, Telegraphs, and Telephones . . . . .	42
(2) External . . . . .	
(a) Overland and River Routes . . . . .	42
(b) Ports . . . . .	44
(c) Shipping . . . . .	46
Coastwise Traffic . . . . .	46
(d) Telegraphic and Wireless Communications . . . . .	47
(B) INDUSTRY	
(1) Labour . . . . .	48
(2) Agriculture	
(a) Products of Commercial Value	
Vegetable Products . . . . .	49
Animals and Animal Products . . . . .	51

	PAGE
(b) Methods of Cultivation . . . . .	52
Irrigation . . . . .	53
(c) Forestry . . . . .	53
(d) Land Tenure . . . . .	54
(3) Fisheries . . . . .	55
(4) Minerals . . . . .	55
(5) Manufactures . . . . .	57
(6) Power . . . . .	59
(7) State Control of Natural Resources . . . . .	60
 (C) COMMERCE	
(1) Domestic	
(a) Principal Branches of Trade . . . . .	61
(b) Towns, Markets, and Fairs . . . . .	61
(c) Organizations to promote Commerce . . . . .	62
(d) Foreign Firms . . . . .	62
(2) Foreign	
(a) Exports	
Quantities and Values . . . . .	62
Countries of Destination . . . . .	63
(b) Imports	
Quantities and Values . . . . .	64
Countries of Origin . . . . .	65
(c) Customs and Tariffs . . . . .	65
(d) Commercial Treaties . . . . .	66
 (D). FINANCE	
(1) Public Finance . . . . .	66
(2) Currency . . . . .	71
(3) Banking . . . . .	71
(4) Foreign Capital . . . . .	72
 AUTHORITIES . . . . .	73
 MAPS . . . . .	74



## I. GEOGRAPHY PHYSICAL AND POLITICAL

### (1) POSITION AND FRONTIERS

FRENCH INDO-CHINA, which is situated in the south-eastern corner of Asia, comprises the colony of Cochin-China and the protectorates of Tongking, Annam, Cambodia, and the parts of Laos which lie for the most part east of the River Mekong—practically the whole of the old Annamite empire—together with the leased Chinese territory of Kwang-chow-wan, which is situated on the east side of the Leichow peninsula in the province of Kwang-tung.

The area of the whole is estimated at 260,000 square miles, apportioned as follows :

	<i>sq. miles.</i>
Cochin-China . . .	20,000
Annam . . .	52,000
Cambodia . . .	45,000
Tongking . . .	46,000
Laos . . .	97,000

With the exception of Kwang-chow-wan (see below, p. 10), all this territory lies between latitudes  $8^{\circ}36'$  and  $23^{\circ}25'$  north and longitudes  $100^{\circ}$  and  $109^{\circ}30'$  east. It is bounded on the north by the Chinese provinces of Kwang-tung, Kwang-si, and Yun-nan; on the north-west by Burma; on the west by Siam; on the south-west by the Gulf of Siam; and on the east by the China Sea. The northern boundary between Indo-China and China is conventional, coinciding with no decided ethnographical division, but follows in the main a mountain range, cutting across the courses of the



Song-koi (Red River) and various of its tributaries. Between Burma and French Indo-China the boundary is defined by the *thalweg* of the Mekong. From here to the sea the entire western boundary marches with Siam, following the watershed of the Mekong on the right bank to the confluence of the River Nam-huong ( $19^{\circ} 45' N.$ ), and then the right bank of the Mekong as far as Pakmoun ( $15^{\circ} 18' N.$ ). From this point the only natural barrier is the comparatively low Dang-rek (or Denrmong) range.

The boundaries between the British Shan States of Burma, Siam, and French Laos are in the main marked by the convenient natural line of the Mekong valley rather than by ethnographical distinctions, but the boundary runs considerably to the west of this river between  $20^{\circ}$  north latitude and the confluence with the Nam-huong. Indo-China and Siam are nowhere separated by any serious natural barrier; and the frontier has been the subject of frequent rearrangement.

## (2) SURFACE, COAST, AND RIVER SYSTEM

### *Surface*

The configuration of the country is determined by two rivers—the Mekong and the Song-koi or Red River—and by the mountain system, which is an offshoot of the great Chinese group of Yun-nan, and spreads in irregular formations over Tongking and Upper Laos, being continued in a long narrow chain down the whole length of Annam, closely adhering to the curve of the coast. The highest point (10,300 ft.) is reached near Lao-kai in Tongking, though several parts of the Annamese chain rise above 6,000 ft.

In Tongking the provinces of Lang-son, That-ke, and Kao-bang in the north-east belong to the basin of the

Si-kiang, or West River, which flows into the sea below Canton; the province of Mon-kay on the east forms a little basin of its own; but the greater part of Tongking consists of the basin of the Song-koi or Red River and its tributaries. Its valley and large delta form the most fertile and populous part of Tongking, the rest of which is for the most part wild and mountainous.

The Annamite chain, which forms the boundary between Annam and Laos, sends out mountainous spurs to the sea, and these divide the country into provinces. The range feeds a number of short rivers which have formed a narrow strip of fertile alluvial plain bordering the coast from the Tongking delta southwards. The river valleys and mountain passes admit of communication between the various provinces of Annam and the coast.

Upper Laos is a tangle of mountain ranges, through the west of which the Mekong winds. In the centre is the large plateau of Tran-ninh, which, if more accessible, might be an important health resort.

In Lower Laos the Annamite chain slopes more gently down to the Mekong, except in the region of the Boloven plateau north-east of Attoupeu. There are rich tracts of country, but they are undeveloped. There are two large plateaux on the west of the chain in southern Annam, the Darlak and the Lang-biang, the latter of which is approached by railway and is destined to be an important sanatorium.

### *Coast*

Indo-China has approximately 1,500 miles of coast. Its outline is that of a large S, and, except in the delta lands, it is generally rocky. The northern part of the coast of Tongking is screened by numerous islands and contains the sheltered bays of Tien-yen, Along, and

Hon-gay, the latter of which contains the natural harbour of Port Courbet. South of this is the Red River delta, flat and harbourless, the ports being high up the rivers. Of these Hai-fong, about 20 miles from the mouth of one of the branches, is the most important, serving as port to Hanoi, the capital of Indo-China. Kwang-yen, Thai-binh, and Nam-dinh are smaller ports accessible only to vessels of shallow draught.

The northern part of the coast of Annam, though rich and populous, is deficient in harbours, but the more barren and rocky southern section abounds in fine bays and sheltered anchorages.

The deltaic coast of Cochin-China is deeply channelled by the branches of the Mekong delta, but is lacking in coastal harbours. The port of Saigon lies 34 miles from the sea on the Saigon, a tributary of the Donnai river. Cambodia has a short coast-line without harbours of importance, and depends on the Mekong for its communication with the sea.

### *River System*

The two most important river systems are those of the *Red River* and the *Mekong*, the former being the main artery of Tongking. It is navigable for river steamers from its mouth to Yen-bai (about 220 miles) at all seasons, and to Lao-kai (about 300 miles) during the high-water season; it is further navigable for junks to Man-hao, in Yun-nan, about 55 miles within the boundaries of China. Its utility, however, is marred by rapids, shoals, and shifting sand-banks. From December to May it is at its lowest level, after which it rises rapidly (from 16 to 20 ft. at Hanoi), frequently washing away its banks. As a consequence the delta lands have to be protected by extensive embankments. Its chief tributaries—the Black and Clear rivers, both of which rise in China and join the main stream near

Vietry, a few miles above the delta—are only navigable for about 56 miles.

The rest of Indo-China lies within the basin of the Mekong, which rises in Tibet and flows through the gorges of Yun-nan before reaching the borders of Upper Laos. It is subject to heavy floods in the wet season, and some of its rapids are only negotiable for a short period of the year. Its extreme limit of navigation is Tang-ho in Siam (about 1,450 miles from its mouth), but, as a rule, it is only navigable for sampans and junks above Vien-tiane ( $18^{\circ}$  N.). From here to the sea it has long reaches navigable for launches, with intervals in which rapids interfere with what would otherwise be an ideal means of communication between central Indo-China and the Gulf of Siam. Its last 270 miles, from Kratie to the sea, are navigable at all seasons by steamers. At low-water period the tide is felt as far as Pnom-penh, but in the high-water period, which begins in May and reaches its maximum in October, the river rises 26 to 33 ft. at this point and to a great height farther up. At Pnom-penh the Mekong is joined by the Bras du Lac, which comes in from the Great Lake (Tonle-sap) in Cambodia. This lake receives much of the flood water of the Mekong and at flood time actually quadruples its area, covering 770 square miles. The area uncovered at low-water season is highly fertile. At Pnom-penh the delta begins, and this, which includes the Vaiko, Donnai, and Saigon, forms a labyrinth of navigable waterways, the chief of which is the channel leading to the great port of Saigon. The low-lying districts at the mouth of the Mekong are subject to extensive floods in the wet season. The Mekong has a number of small tributaries on both banks, the most important being the Se-moun, which joins it on the right bank at Pak-moun.

Cambodia to a great extent, and Cochin-China almost entirely, consist of flat alluvial lands formed by the Mekong system, intersected by waterways, extremely fertile and producing heavy crops of rice which support a large population.

### (3) CLIMATE

The climate of Indo-China varies considerably with the latitude and altitude of the different parts, but an excessively hot summer is common to the whole. In the south there are two seasons, the wet and the dry, corresponding with the monsoons, though in the low-lying country the heat is great all the year round and for the most part humid and exceedingly trying for Europeans. The north-east monsoon blows from about the middle of October to the middle of April, and during this period, the dry season, the temperature remains almost steady, between  $78.8^{\circ}$  and  $80.6^{\circ}$  F. ( $26-27^{\circ}$  C.) by day and  $68^{\circ}$  F. ( $20^{\circ}$  C.) by night. From mid-April to mid-October, the wet season, the monsoon blows from the south-west; and the temperature rises to between  $80.6^{\circ}$  and  $84.2^{\circ}$  F. ( $27-29^{\circ}$  C.), at which it remains day and night with little variation. April and May are the hottest months, with a temperature from  $86^{\circ}$  to  $93^{\circ}$  F. ( $30-34^{\circ}$  C.).

In Tongking and northern Annam the summer is very hot, with frequent storms and heavy rain. The winter from November to February is dry and pleasant; while from February to April the climate is cool and damp, with much fine rain and mist in the Red River delta. In Tongking the wind blows steadily from the south-east from May to October; and the temperature rises above  $83^{\circ}$  F. ( $28.3^{\circ}$  C.), frequently reaching  $95^{\circ}$  F. ( $35^{\circ}$  C.) and more. In Annam, June, July, and August are a dry season, the thermometer varying between  $86^{\circ}$  and  $95^{\circ}$  F. ( $30^{\circ}$  and  $35^{\circ}$  C.), with comparative coolness

at night. The north-east monsoon brings rain in September; and this is also the month of typhoons. The mountainous country in the interior has a cooler and drier climate.

#### (4) SANITARY CONDITIONS

The hot, moist climate of southern Indo-China is extremely trying for Europeans. Depression and anaemia are the direct results of the enervating conditions. Tongking is more habitable, owing to its wholesome winter season. Dysentery, malaria, cholera, and small-pox are prevalent throughout the whole region, but may be avoided by proper sanitary precautions. The forests and jungles of the interior are unhealthy.

#### (5) RACE AND LANGUAGE

The natural attractions of the river deltas and the fertile coastlands have drawn to them invading races from India, China, and Tibet, who have either absorbed the natives or driven them into the wretched and unhealthy inland districts. Of these invading races the most important are the following:

The *Cambodians*, who claim a Khmer origin and an Indian civilization, overran the country bordering on the lower Mekong and the Great Lake in the early Middle Ages, their most prosperous era being between the sixth and twelfth centuries.

The *Hindus* established two colonies at the beginning of the Christian era—one in the south-eastern corner of Indo-China (the Champa), and the other on the lower Mekong. They were both absorbed, though a few survivors still retain their national characteristics under the name of Chams.

The *Thais*, from the borders of Tibet, northern Yun-nan and Upper Burma, spread into Tongking and

Laos, where they still form a large portion of the mountain population.

The *Annamese*, a Mongol type, are said to have come from southern China about the second century B. C. They gradually overran all the fertile lands of Tongking and Annam, and spread into Cochin-China and Cambodia. They now represent about four-fifths of the total population of Indo-China. They are, as a whole, industrious and comparatively energetic, good agriculturists, clever workmen, intelligent, and quick learners. Their language is akin to Chinese; and the Chinese written character is in general use.

The *Chinese*, who followed the Annamese invaders and for a long time dominated them, are now scattered throughout Indo-China, where their superior commercial aptitude has given them command of the trade and minor industries.

A continual stream of immigrants strongly imbued with Chinese influences is constantly filtering down into Indo-China, including the Mans from Fu-kien and Hu-nan, the Meos from Upper Kwei-chow, the Lolos from Sze-chwan and Upper Yun-nan, and the Nungs from southern China. They have settled where they could find congenial conditions of climate and soil, and have for the most part mingled peaceably with the other inhabitants. The official European language is French, but intercourse has hitherto depended very much on the help of interpreters.

## (6) POPULATION

### *Distribution and Density*

No census of the population has been taken except in Cochin-China, and we are dependent upon estimates which vary considerably. The official estimate for 1914 was 16,645,638, made up as follows :

Cochin-China . . . .	3,050,785
Annam . . . . .	5,200,000
Cambodia . . . . .	1,634,252
Tongking . . . . .	6,119,724
Laos . . . . .	640,877

The lowest estimate brings the total down to 10,000,000.

The distribution of this population is very unequal. The fertile delta lands, the borders of certain rivers, the region of the Great Lakes, and the northern half of the Annamese coast are more or less thickly populated; the forest and mountain regions of the interior are for the most part uninhabited.

The European population, mainly French, was 23,700, including military, in 1914.

### *Towns and Villages*

In Tongking the Red River (Song-koi) delta is a teeming district with several large towns and innumerable villages. Hanoi with its suburbs, at the head of the delta, has 150,000 inhabitants. It is the capital of Indo-China, and has a large modern town laid out by the French beside the native city. Hai-fong, the port of Hanoi, situated on one of the arms of the Red River, is a busy commercial town with 25,000 inhabitants. Nam-dinh, in the southern part of the delta, is a flourishing native town with 50,000 inhabitants.

In Annam the capital, Huế, has about 60,000 inhabitants. It lies about 9 miles from the sea, and has an indifferent harbour. Tourane (7,000 inhabitants), in a beautiful and well-sheltered bay, is a second-class port with a considerable trade. Fai-fo (Wang-nam), near Tourane, is a busy centre of Chinese trade.

In Cochin-China the delta lands at the mouth of the Mekong are densely populated, with thriving towns connected by a network of waterways. The capital, Saigon, is a beautiful modern town with about 100,000



inhabitants, and, though 40 miles from the sea, has a harbour of great commercial and naval importance. The neighbouring town of Cholon (population, 170,000) is purely commercial and mainly Chinese. Other towns of considerable population in the delta are My-tho (27,000), Sadek (15,000), and Vinh-long; Bien-hoa (20,000) at the head of navigation of the Donnai river, and Baria (30,000) in the south-eastern corner of the province.

In Cambodia the capital, Pnom-penh, at the junction of the Mekong and the Bras du Lac, has a population of about 60,000. The banks of the Mekong and the borders of the Great Lake are the most populous parts of the rest of the province.

Laos is thinly inhabited, with few towns of importance. Vien-tiane, the administrative centre, has about 10,000 inhabitants; and Luang-Prabang, in Upper Laos, has 12,000. For the rest, the province contains rich tracts of country, but is undeveloped.

### *Movement*

In the absence of statistics it is difficult to speak of the movements of the population. The capital towns, such as Hanoi, Saigon, and Hué, especially Hanoi, have grown rapidly during the French occupation. Parts of Annam have suffered from time to time from the ravages of famine caused by disastrous storms and drought, and the consequent failure of the rice harvest; but the French have done much to remove these dangers by irrigation works and improved communications.

### *KWANG-CHOW-WAN*

The leased territory of Kwang-chow-wan is regarded as part of French Indo-China. Its position is approximately in 21° 5' north latitude and 110° 40' east

longitude, on the eastern side of the Leichow peninsula, which projects from the province of Kwang-tung towards the island of Hainan. Its area is 190 square miles, or 325 including the bay of Kwang-chow-wan with the islands which enclose it and the mouth of the Matshe river. The land boundaries are purely conventional, being defined by agreement with the Chinese Government, who leased the territory to the French in 1898 for a period of 99 years. It lies close to the main trade route between Europe and China, and is the best harbour in this part of the Kwang-tung coast. The French occupied it as a possible naval base, but at present it is unprovided with quays, docks, or harbour facilities. The approach, which is covered by the islands of Tan-hai and Nau-chow, consists of a deep channel interrupted by a bar with only  $3\frac{3}{4}$  fathoms of water at low tide. In the bay is a secure anchorage between the 5-fathom contours. The bay is a continuation of the estuary of the Matshe river, which provides a fine inner anchorage up to three miles from the mouth. The surrounding country is poor.

The climate is very similar to that of Tongking.

There are about 189,000 Chinese inhabitants, distributed over some 800 villages and a few small towns. The latter include Chi-khom, a junk port on the Matshe river, Po-tao on the east, and Fort Bayard and the French town of Kwang-chow-wan at the mouth of the river. The foreign residents are mainly the French officials and garrison.

## II. POLITICAL HISTORY

### CHRONOLOGICAL SUMMARY

*Fifth Century.* The Khmer dynasty in Cambodia.

*Ninth Century* (end). Angkor founded.

968. Annamese dynasty set up in Annam.

*Twelfth Century.* Conquest of Cochin-China and South Annam by Cambodia.

*Fourteenth Century.* Fall of the Khmer dynasty.

1428. Restoration of Annamese dynasty after an interlude of Chinese rule.

*Fifteenth Century.* Abandonment of Angkor.

1568. South Annam becomes a separate principality as Cochin-China.

*Sixteenth Century.* Portuguese and Dutch reach Cambodia.

*Seventeenth Century.* Southern Annamese encroach on Cochin-China.

*Seventeenth and Eighteenth Centuries.* Struggle between Siamese and Annamese in Cambodia.

*Eighteenth Century* (end). Rebellion in Cochin-China.

1787. Treaty between France and Cochin-China.

1801. Gia-long establishes himself in Tongking.

1846. Annamese evacuate Cambodia.

1858. Franco-Spanish fleet at Tourane.

1862. Treaty between Cochin-China and France and Spain.

1863. French Treaty with Cambodia.

1867. Franco-Siamese Treaty.

1873. Garnier seizes Hanoi. The Black Flags.

1874. Franco-Annamese Treaties.

1880. Annam accepts position of Chinese tributary.

1882. Rivière's expedition.

1883. Death of Rivière. Capture of Son-tai.

1884-5. Franco-Chinese imbroglio.

1885. Treaty of Tientsin. Revolt of Annamese Government.

1891. De Lanessan Governor-General.

1893. French ultimatum to Siam. Treaty and Convention with Siam. British intervention.

1895. Franco-Chinese Convention.

1896. Joint declaration by Great Britain and France.

1904. } Franco-Siamese Treaties.  
1907. }

(1) FROM EARLY TIMES TO THE MIDDLE OF THE  
NINETEENTH CENTURY

*CAMBODIA*

THE Khmer country, Cambodia, is mentioned in Chinese records from an early date. Some centuries before the Christian era, Brahmanism and the Sanscrit language were imported there from the east coast of India, and by the fifth century A.D. the Indian influence had become marked. The Khmer nation were prominent at this period, and native dynasties ruled for many centuries. The city of Angkor was founded at the close of the ninth century, and shortly afterwards Buddhism began to rival the official religion—Brahmanism. Cochin-China and South Annam were conquered in the twelfth century, and war was waged against the peoples in the west of Cambodia; but soon afterwards the decline of the Khmer power began, and the Thai races of Siam were able to throw off the Khmer yoke about the beginning of the fourteenth century. Constant aggression by the Thais led to internal dissension and the abandonment of Angkor in the fifteenth century.

The western nations appeared on the scene in the sixteenth century, when the Portuguese obtained a footing in Cambodia. They were followed by the Dutch; but after the middle of the seventeenth century there was little European influence until the arrival of the French.

About the beginning of the seventeenth century the Nguyen rulers of South Annam began to encroach on

Cochin-China, and during that century and the eighteenth Cambodia, which was governed by two kings supported respectively by Siam and Annam, became a field for the conflicts of its two powerful neighbours. The Cambodian provinces of Battambang and Siemrap were annexed by Siam at the close of the eighteenth century, and the rivalry of the two Powers was concluded after a long war by a treaty of 1846, under which the protégé of Siam was placed on the throne, and the Annamese evacuated Cambodia.

#### *ANNAM, TONGKING, AND COCHIN-CHINA*

Up to the tenth century of our era the rulers of the countries now known as Annam and Tongking appear to have been of Chinese descent, and the peoples they governed were mainly Chams, whose civilization was Hindu, and Annamese, who are held to have come originally from South China. In 968 the Chinese domination was displaced and an Annamese dynasty was founded. Though for a short time at the beginning of the fifteenth century Chinese rule was restored, an Annamese dynasty resumed the sovereignty in 1428 and endured until the end of the eighteenth century. During the greater part of these four hundred years the titular sovereigns were puppets, and the real control remained in the hands of the Trinh family in Tongking, and of the Nguyen family in South Annam, which in 1568 became a separate principality known as Cochin-China. Here towards the close of the eighteenth century there was a rebellion which overthrew the Nguyen, and one of the members of this family, Gia-long, sent the missionary Bishop Pigneau de Béhaine to France to invoke assistance for the purpose of regaining control of the country.

*French Treaty of 1787.*—At Versailles on November 28, 1787, Bishop Pigneau, on behalf of Gia-long,

concluded a treaty with Louis <sup>XVI</sup>XIV, in which Tourane and the islands of Pulo-Condore were ceded to France in return for specified military assistance to replace Gia-long on the throne of Cochin-China. This treaty also established an alliance between the two countries, under which Cochin-China was bound to assist France in wars against other Powers, while the help of France could be invoked by the King of Cochin-China only in the case of aggression.

(2) FROM THE MIDDLE OF THE NINETEENTH  
CENTURY

*Franco-Spanish Treaty of 1862.*—The successors of Gia-long were antagonistic to the French influence, and persecutions of the Christian missionaries and converts followed. These led in the reign of Tu-duc in 1858 to the arrival at Tourane of a Franco-Spanish fleet. After the capture of that town Saigon was stormed, and Rigault de Genouilly made it his base of operations; but his inadequate forces confined him to the defensive, and he was soon blockaded by an Annamese general. Admiral Charnier arrived at Saigon with reinforcements in February 1861, the Annamese were driven off, and My-tho was taken. A revolt against Tu-duc in Tongking and the stoppage of the rice supplies from Cochin-China obliged him to submit and to conclude a treaty (June 5, 1862) with France and Spain, by which three provinces of Cochin-China were ceded and other concessions accorded to France. Spain obtained little more than freedom for Christian propaganda and a share in the indemnity of four millions of dollars which was exacted from Annam.

*Treaty with Cambodia, 1863.*—In 1863 Doudart de Lagrée was sent by Admiral La Grandière, who had appointed Governor of Cochin-China, to the King Norodom of Cambodia, to counteract the influence in that country. As a result of his

Cambodia accepted the protectorate of France in a treaty signed at Houdong on August 11, 1863. Under La Grandière the exploration of the Mekong was undertaken by Garnier, and to put an end to covert opposition and hostility encouraged by the Annamese governors, the three provinces of Cochin-China, which had been left to Annam by the treaty of 1862, were annexed by a proclamation of June 25, 1867. Soon afterwards (July 15, 1867) a treaty was concluded at Paris between France and Siam 'to regulate the political position and limits' of Cambodia, and by this Siam renounced the right to tribute, and recognized the French protectorate in return for the two provinces of Battambang and Angkor.

*French Penetration of Tongking.*—Tongking was loosely united to Annam until 1801, when Gia-long brought it definitely under his sway. After the treaty of 1862 the French turned their attention to this province, which was reported to be rich in minerals. A French trader, Jean Dupuis, attempted to make use of the Red River (Song-koi) route to Yun-nan to convey military stores to the Chinese authorities who were fighting the Taiping rebels, and Captain Senez was sent from Saigon to open it to French trade. Dupuis forced his way through in face of the opposition of the Tongkingese authorities, and on his return to Hanoi an order was issued calling upon him to leave the country. He refused to do so, and Garnier was sent to Hanoi with a detachment to arrange matters. The latter sided entirely with Dupuis, and, the Tongkingese refusing to treat with him except on the subject of Dupuis' expulsion, he attacked the citadel of Hanoi, carried it by assault, and established himself there (November 1858). Reinforcements were called for from Saigon, and meantime small detachments captured the five strongest strongholds of the delta. The Tongkingese

now invoked the assistance of Liu Yung-fu (Lu Vinh-phuoc), the leader of the Chinese rebels known as 'Black Flags', who infested the Tongking border. The Black Flags attacked at once, and in the opening fights Garnier was killed. The Saigon authorities, who had not bargained for a policy of aggression, sent M. Philastre to apologize to the King of Annam, and the French detachments were withdrawn from three of the delta strongholds.

*Franco-Annamese Treaty of 1874.*—Negotiations which had been carried on fitfully with the Court of Hué since the annexation of the three provinces by La Grandière in 1867 were now taken in hand seriously to regularize the situation, and the result was the treaty of March 15, 1874, which took the place of that of 1862. By this Annam at last recognized the annexation of 1867, and in return France abandoned the unpaid balance of indemnity due from 1862—some £220,000. Military and naval assistance was given by France to Annam to put down brigandage on the Chinese border and piracy along the coasts of Tongking, and personnel and material were promised to enable Annam to reorganize her fleet and army, re-establish order in the administration, create customs and revenue services, and direct works of public utility. Annam renounced the power to conclude political alliances with other States, but retained the right to contract treaties of commerce after giving notice to France. Fuller protection was accorded to the Christian religion, and converts were relieved from political disabilities. A treaty of commerce followed on August 31, 1874, by which certain ports and the Red River to the Chinese frontier were opened to trade.

The Comte de Rochehouart brought the political treaty, in which France recognized the sovereignty of the King of Annam and 'his entire independence



*vis-à-vis* any foreign Power whatsoever', to the notice of the Chinese Government, and received a reply mentioning that Annam had been for long a tributary of China, but raising no objection to the terms of the treaty. Later, however, on September 24, 1881, the Marquis Tsêng informed M. Barthélemy Saint-Hilaire that the Chinese Government were unable to recognize the Treaty of 1874. 全权主政

✓ *The Chinese Suzerainty of Annam.*—For some years the situation so remained, French interests and prestige having suffered severely by the death of Garnier and the withdrawal of the French troops in Tongking. The Garnier aggression had turned the Annamese Court towards China, which had for centuries exercised a nominal suzerainty over Annam; the tribute remissions were now sent more regularly to Peking; and in 1880 the King dispatched a special mission bearing a letter in which the position of tributary was emphasized. China accepted the responsibility by publishing the King's letter in the *Peking Gazette*.

*French Conquest of Tongking.*—In 1882 the Governor of Cochinchina, Le Myre de Vilers, sent Henri Rivière with a small force to open up the Song-koi route to Yun-nan. He, like Garnier, found the Tongkingese intractable, stormed the Hanoi citadel, and went on to capture the other towns in the delta. Once more the Black Flags were called in, and again, like Garnier, Rivière fell a victim in one of the early encounters (May 1883). This event led Jules Ferry to decide on a forward policy; but at first the outlying garrisons were withdrawn, except from Nam-dinh and Haifong; and Hanoi was beleaguered by the Black Flags. Efforts made by Admiral Courbet and General Bouet were by no means successful, and the Commissary-General Harmand went to Hué, supported by Courbet, to bring pressure to bear upon the Annamese Court.

Tu-duc's successor was hostile, and Hué was stormed. Harmand concluded a treaty (August 25, 1883), in which Annam accepted the French protectorate, another province was annexed to Cochin-China, and the French were authorized to take military measures in Tongking. Bouet now again advanced against Son-tai, though the Chinese representative at Paris protested, and after one unsuccessful attempt the place was captured on December 16, 1883.

*Franco-Chinese Imbroglia*, 1884-5.—In this campaign the French were fighting against Chinese troops. There had been negotiations at Peking since November 1882; but no progress was made till the spring of 1884, when the Tientsin Viceroy, Li Hung-chang, intimated to the French Admiral, who had arrived at Shanghai with a squadron, that he would be glad to consider the situation with Captain Fournier, a French naval officer known to him. In this way a preliminary convention was concluded by Li and Fournier (May 11, 1884), by which China agreed to evacuate Tongking and to respect the Franco-Annamese treaties, while France engaged to respect the Chinese frontiers on the south and to pay regard to the prestige of China in the treaty which France was about to conclude with Annam. In the month following (June 6, 1884) another treaty signed by M. Patenôtre at Hué confirmed and extended the French protectorate over Tongking and Annam, altered some of the territorial arrangements of the Harmand Treaty of 1883, which had not been found satisfactory, and replaced the treaties of 1874; but in view of the discontent aroused it was not set in force for some years. Concurrently the Governor of Indo-China, M. Thomson, negotiated a convention with King Norodom, confirming and completing the treaty of August 11, 1863, strengthening the French position, and abolishing slavery, in Cambodia.

Unfortunately, a serious misunderstanding arose in connexion with the execution of the Li-Fournier Convention of May 11, 1884. A supplementary agreement fixed the dates for the evacuation of certain places in Tongking by the Chinese troops, but when the French commander proceeded to act upon it, it was found that the Chinese military authorities had not received corresponding instructions, and a collision occurred in which the French were worsted. A period of hostility followed between France and China, which was ended by a protocol signed at Paris (April 4, 1885) through the good offices of Sir Robert Hart. The effect of this protocol was to confirm the Fournier Convention, and it was followed by a treaty executed at Tientsin (June 9, 1885), in which China undertook to respect the 'treaties, conventions, and arrangements', present and future, concluded between France and Annam. Two later conventions (June 26, 1887) delimited the China-Tongking frontier and established the existing commercial relations between Tongking and China.

*Pacification of Tongking.*—For some years, till 1891, the French proceeded generally with the conquest and annexation of Tongking and Annam under cover of the 1884 treaty. When Hué was occupied in July 1885, the Annamese Government revolted. The revolt was suppressed, the new king fled, and civil war ensued in Annam. Tongking also rose, and the disorders tempted the Black Flags and Tongkingese rebels to devastate the country. The occupation of Tongking became a prolonged struggle with numerous bands of dacoits, which extended through the years 1885 to 1890, and cost the French a serious expenditure. Trade was almost at an end, and the French were gradually driven to the Red River delta, where they held the chief towns only. From Hanoi itself the Governor-General could see the smoke of the villages burned by the bandits.

With the arrival of M. de Lanessan as Governor-General in April 1891 a new era began. Heretofore the French had proceeded on the erroneous assumption that the Tongkingese and Annamese were two distinct peoples, and that the former were the oppressed vassals of the latter. De Lanessan ascertained that the way to peace in Tongking lay through the Court at Hué, and he concluded an agreement which reassured the King, who had been afraid of annexation. The King issued a proclamation which had the immediate effect of stopping all disorders except those conducted by the Black Flag pirates. In a couple of years these also were overcome, and the pirate chiefs made their submission.

*French Disputes with Siam.*—On the Chinese frontier agreements were concluded with Marshal Su, the Chinese commander, for co-operation in the suppression of piracy; but there were difficulties on the Siamese frontier. Friction arose between the French agents and Siamese troops, and after the death of Inspector Groscurin (June 5, 1893), the French Government occupied Stung-treng and Khong. Redress was demanded at Bangkok and refused. After an ultimatum which was not complied with, French gunboats forced the passage to Bangkok, and a second ultimatum was presented. This called for (1) the occupation of Chantaboun by the French until Siam evacuated the left bank of the Mekong; (2) the interdiction to Siam to maintain troops at Battambang, Siemrap, and generally within  $15\frac{1}{2}$  miles of the right bank of the Mekong; (3) or to have armed boats on the Tonlesap.

This ultimatum was executed immediately. The Siamese evacuated the left bank of the Mekong, and the King of Luang-Prabang submitted with alacrity to the French, who took possession of Laos. By a treaty

and convention concluded by Le Myre de Vilers at Bangkok on October 3, 1893, Siam renounced all claim to territory on the left bank of the Mekong or to the islands in the river ; undertook to maintain no troops or fortified posts in the provinces of Battambang and Siemrap and in a strip, 25 kilometres wide, along the right bank of the Mekong ; and agreed that France should continue in the occupation of Chantaboun until the terms of the treaty and convention were executed.

*British Intervention and the Franco-British Declaration of 1896.*—The British Government took a serious view of the dispute between France and Siam. Negotiations were opened at Paris and a memorandum was signed on July 31, 1893, by Lord Dufferin and M. Develle, in which both Powers recognized the necessity of constituting a neutral zone between their possessions on the upper Mekong, and agreed that the limits of this zone should be determined later. A Franco-British Commission sat for this purpose at Paris, but was unable to attain its end through want of precise knowledge of the political boundaries and physical conformation of the territories in question ; it was mutually agreed to suspend action until technical agents of both countries should have made investigations on the spot. However, a convention between France and China, concluded at Peking on June 20, 1895, again brought the question sharply to the front. By an earlier convention of March 1, 1894, Great Britain had agreed to leave to China two small States, Mung Lem and Kiang Hung, over which the King of Ava and the Emperor of China had exercised suzerain rights concurrently, with the proviso that no portion of them should be alienated to any other Power without previous agreement with Great Britain. Kiang Hung lies astride the Mekong, and by the French Convention the portion of it on the left bank was assigned to France.

Before the transaction was completed the British Minister at Peking protested; and eventually compensation was accorded to Great Britain by China for the breach of treaty, while, by a joint declaration of January 15, 1896, Great Britain and France agreed that the *thalweg* of the Mekong should be the boundary between the possessions or spheres of influence of the two Powers as far as the Chinese frontier.

*Franco-Siamese Treaties of 1904 and 1907.*—A new Franco-Siamese treaty of February 13, 1904, modified that of 1893: Chantaboun was evacuated and the neutral zone along the Mekong was renounced in return for Bassak, Melupré, the district of Dan-Sai (comprising that portion of Luang Prabang on the right bank of the Mekong), and the maritime district of Kratt. By a further convention of March 23, 1907, Siam gave up Battambang, Siemrap, and Sisophon, and received in return Kratt and Dan-Sai, which were ceded in 1904.

### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

THE religion of the Annamites, who comprise about four-fifths of the population, appears on the surface to be a pale reflection of the religious doctrines and ceremonies prevalent in China. Ten centuries of domination by China have no doubt left a deep impression; but the mass of the population has not been affected so much as the official and learned classes, who by virtue of their studies in classical Chinese have imbibed the philosophy of Confucius. The chief manifestations, however, of the religious life of the people consist in ancestor-worship, spirit-worship, and respect for the dead, combined with an external aspect of Buddhism.

In every native house—even the poorest—a space is reserved for ancestral worship, and an altar is there erected for the domestic rites, which, as a rule, are performed by the eldest son, and are similar to those observed in China. The beings, objects, and phenomena of nature to which special spirits are attributed by the Annamites are innumerable. Every wood—and indeed almost every old tree—harbours a particular divinity. Every mountain, hill, and stream has its good or evil spirit. Natural phenomena, such as clouds, thunder, wind, rain, &c., have been deified, as well as the sun, moon, and stars. Amongst animals the worship of the tiger is widespread.

In Cambodia and Laos the religion is Buddhism, with traces of Brahmanism in Court circles. Temples and numerous monks or priests are to be found in

every village in Cambodia. The monks lead a life of self-control and restraint, and they are respected and regarded with affection by the people. Spirit-worship is prevalent.

In Laos temples are not so numerous as in Cambodia; the priests are more ignorant, and in practice Buddhism is reduced to external signs of deference to the priests and sacred places. The propitiation of evil spirits is the dominant characteristic of religious life in these backward regions.

Roman Catholic missions have been established in Indo-China since 1660, and central Tongking is still the field of labour of a body of Spanish missionaries. Elsewhere French missionaries have numerous stations.

## (2) POLITICAL

### *Government and Administration*

The Governor-General is the supreme administrative and military authority, and he is assisted by a Superior Council created in its present form in 1898. It corresponds to a Legislative Council, and is composed of the Governor-General as president, the military and naval Commanders-in-Chief, the Secretary-General of Indo-China, the Governor of Cochin-China, the Residents Superior of Tongking, Annam, Cambodia, and Laos, the heads of departments of the Government-General, the President of the Colonial Council of Cochin-China, the presidents of the various Chambers of Commerce and Agriculture, two high native officials, and the Chief of Cabinet of the Governor-General, who acts as Secretary to the Council.

The Superior Council at present numbers thirty-two members. It must meet once a year, but not necessarily at the same place, although Hanoi is considered the seat of government. It considers the budgets prepared for each of the five divisions of Indo-China as well as



the General Budget, and advises on any legislation or important measures which may be in contemplation.

For the better disposal of business there are four committees of the council dealing with the following branches of administration: (1) military and naval affairs, public works, railways, and commerce; (2) legislative and administrative organization; (3) budgets; (4) financial matters.

When not in session the council delegates its functions to a permanent commission of thirteen members.

Cochin-China is a French colony, and is represented in France by a deputy elected by the French citizens. It is directly administered by a Governor, assisted by a Privy Council. The Colonial Council, elected partly by the French population and partly by natives, votes on the budget.

Tongking, Annam, and Cambodia are protectorates, of which the chief French official is designated Resident Superior. He is assisted by a Protectorate Council, composed of the heads of departments and delegates of the Chambers of Commerce and Agriculture.

Laos is directly administered by a Resident Superior, who exercises a general supervision over the native officials by whom the work of administration is carried on, with the assistance of a limited number of French officers.

The Resident Superior is the representative in his division of the Governor-General, with whom he corresponds. He carries out the execution of the laws and decrees, he maintains public order, and the personnel of the local administration is placed directly under his orders. In 1897 the direct control of the Residents Superior in Tongking and Annam was strengthened by the abolition of the functions of the native Viceroy in Tongking and the transformation of the *Co-mat* (Secret Council) of the King of Annam into a Council of

Ministries, whose decisions require the approval of the Resident Superior before they can be executed.

Tongking is now in fact a protectorate in name only.

Kwang-chow-wan, the territory leased from China, is administered by French officers working in close co-operation with the local officials.

### *Justice*

In Cochinchina justice is administered in French courts by French judges. There are five magistrates (*juges de paix*), nine Courts of First Instance at different centres, and a branch of the Court of Appeal for Indo-China sitting at Saigon. The judges of the Courts of First Instance also exercise the functions of magistrates. There are, in addition, four criminal courts. Natives are not allowed to sit as judges.

French law is applied, modified by decrees where natives are solely concerned. In civil cases, local laws and customs are, to a certain extent, taken into consideration.

In Tongking, French judges with extensive powers sit at Hanoi, Hai-fong, and Nam-dinh. The Resident of each province exercises the jurisdiction of a magistrate, but he takes cognizance only of cases in which Europeans, French subjects, and foreigners are concerned. An appeal lies to the Court of Appeal for Indo-China, which sits at Hanoi.

Natives have their cases adjudicated by local officials in accordance with the native law and the ancient complicated system of procedure. When the evidence is recorded, the papers are remitted to different departments in Hanoi, according to the nature of the case, and judgement is given by officials therein, subject to the approval of the Resident Superior.

In Annam there exists a similar system.

In Cambodia and Laos, where the French Residents

likewise sit as judges in serious cases, the native courts enjoy a greater measure of independence.

Throughout Indo-China, Europeans can only be tried for serious criminal offences by French judges at specified centres.

### *Army and Police*

In normal pre-war times the military forces numbered about 25,000, of whom half were natives. The country is policed by natives, supervised by French officers.

### (3) EDUCATIONAL

The study of Chinese characters and classical literature, which prevailed in Tongking, Annam, and Cochinchina before the arrival of the French, is still maintained. Instruction is given in primitive native schools by retired officials, or by scholars who have failed to pass the higher examinations, in return for a pittance, supplemented by presents from their pupils.

When a child has mastered 500 or 600 characters, he may continue his studies at one of the Government schools which have been instituted in all the principal centres. There are three grades of such schools, and the teachers are paid by the State. In the second and third grades, a French education is imparted by European professors and by native teachers trained for the purpose. From these schools are recruited the interpreters and French-speaking Annamites in Government service.

A system of Roman characters has been invented for the Annamite language, and this is extensively used in the higher-grade schools.

In Cambodia, where there exists a language with an alphabet and native characters, instruction in reading and writing is almost universal. This is given by the

priests in the temples. In addition there are Government schools where French is taught.

In Laos a similar education prevails, but it is not so widespread.

The École Française d'Extrême Orient occupies itself chiefly in archaeological studies, the search for and care of ancient monuments, and the study of the languages of Indo-China and neighbouring countries.

### GENERAL OBSERVATIONS

The natives of Indo-China have accepted with apparent placidity the rule of the French, though disturbances have occurred from time to time in Annam and Tongking which show that discontent and unrest are at work beneath the surface. A recrudescence of revolutionary movement took place in Annam in 1917, but it has never been and is unlikely to be at any time so serious as to give the French authorities much trouble. Incidents on the Franco-Chinese frontier are constantly happening, owing to the predatory expeditions of 'brigands' from Chinese territory, or to the disarmament by the French authorities of Chinese refugees ; but a more or less satisfactory settlement of such affairs is usually arrived at with China or with the Chinese officials of Yun-nan.

[ French Indo-China has been increasing in prosperity from year to year since 1898, but has by no means attained the full extent of economic development which is possible. This is evident if a comparison is made with the independent kingdom of Siam, which possesses a climate, productions, and a race of people analogous to those of Indo-China. Both as regards revenue and total trade, Siam, in proportion to her population, can claim considerable superiority. 7

## IV. ECONOMIC CONDITIONS

### (A) MEANS OF COMMUNICATION

#### (1) INTERNAL

THE main lines of communication of northern Indo-China radiate from the capital Hanoi. They run north-west up the valley of the Red River into Yun-nan; north-east to Lang-son and thence following the basin of the Si-kiang into Kwang-si; east down the delta of the Red River to the port of Hai-fong; and south along the western side of the same delta to the border of Annam. From this point the eastern line follows the coast down the whole length of Annam, sending off transverse lines at intervals across the Annamese chain into Laos and Cambodia. Cochin-China in the south is reached by this coastal route, which continues through Saigon to My-tho and Sadek on the Mekong. In Cochin-China, Cambodia, and Laos the Mekong and its branches form the main artery of communication, to which are added numerous canals and waterways, and several good roads which radiate from Saigon and Pnom-penh.

#### (a) *Roads and Paths*

The roads previous to French occupation were little better than tracks, sometimes suitable for carts, but more often only fit for foot or equestrian traffic. The French have made good roads of many of these tracks, and have built a network of military roads in the north suitable for wheeled traffic. Some of these in the more populous districts are destined to carry tramway lines. The work of extension, maintenance, and improvement goes on steadily from year to year.

*Tongking.*—In Tongking all the principal towns are connected by carriage-roads, which form a network in the Red River delta. In the mountainous regions of the north-west, however, rough tracks and bridle-paths are still the only means of communication.

The statistics for 1914 show that out of 5,515 miles of roads in Tongking 465 miles were metalled, the width of the metalling varying from  $6\frac{1}{2}$  to 23 ft.

*Annam.*—The roads from Hanoi to Lang-son and Ninh-binh are part of the old mandarin road which runs south along the coast of Annam, linking up Tongking and Cochin-China. This road crosses the Annamese frontier at Bim-son and follows the coast, passing through all the important towns of Annam. In the populous districts it has been rebuilt and is maintained in good order; in parts of southern Annam it is still a mere path. The total length of the mandarin road in Annam is about 900 miles, of which 382 were metalled in 1914, and 122 were still in the condition of pathways. Other roads totalled about 1,450 miles, of which 140 were metalled. There are a number of transverse roads leading from the mandarin road into interior Annam or crossing the Annamese chain at favourable points into Laos and Cambodia, but only one or two of these are fit for wheeled traffic along their whole length.

*Cochin-China.*—In Cochin-China road communications have been specially developed in the eastern parts of the colony, water communications in the west. In 1914 the returns showed a total of 1,710 miles of metalled roads, and 1,026 miles of unmetalled. The mandarin road along the coast of Annam is continued in Cochin-China through Baria to Saigon, whence good roads run in all directions.

*Cambodia.*—Of the numerous roads in Cambodia only portions amounting to about 400 miles were metalled in

1914. The most important is that leading from Saigon by Tay-ninh to Pnom-penh and on to Battambang, Sisophon, and the Siamese frontier, in all about 400 miles. It is suitable for motors almost as far as Sisophon, and about 186 miles in Cambodia were metalled in 1915. A steam ferry crosses the Mekong at Ba-nam; elsewhere this route is served by bridges. There is a metalled road from Pnom-penh to the port of Ha-tien (122 miles) by way of Kampot, and another from Pnom-penh to Chaodok in Cochin-China.

*Laos.*—Road-making in Laos is still in its infancy and only short stretches have been metalled. Along the Mekong there are occasional stretches of road to supplement water communications.

The chief obstacles to road transport in Indo-China are the numerous rivers and canals. These are gradually being surmounted by the erection of temporary wooden bridges and permanent structures in reinforced concrete. Much permanent bridging has already been completed in Tongking, and in Annam in 1914 the programme of construction included thirty-four bridges with a total length of 5,828 ft. Where no bridges exist ferries have been established.

Native road-transport consists of the small but sturdy native horses and mules for riding and pack-transport, coolie porters, and wheelbarrows. Palanquins and rickshaws are available in the neighbourhood of towns. Ox-carts are largely used in Cambodia, and elephants occasionally in Cambodia and Laos. The Europeans have added carriages and motors where suitable roads exist, but make use of the native means elsewhere.

### *(b) Rivers and Canals*

*The Red River System.*—The main features of the Red River system, which includes practically all the

navigable waterways of Tongking, have been already described (p. 4). Further details may be considered in two divisions: (i) the river above Hanoi, (ii) the river below Hanoi, and the delta.

(i) From its source in Yun-nan as far as Yen-bai in Tongking the Red River flows in a confined channel: from Yen-bai onwards it is bordered by an ever-widening alluvial plain. The river is subject to a great rise between the months of June and October, due to the melting of snows in the mountains and to the heavy rains of the season. In 1913 the difference between high-water and low-water levels was 38 ft.—the maximum up to that date; in 1891 the difference was only  $3\frac{1}{2}$  ft. Navigability is impaired in the low-water season by rocks above Yen-bai and by shifting sand-banks below, so that the light-draught river steamers can only reach Lao-kai (about 300 miles up-stream) from July 1 to October 15; Yen-bai (about 220 miles upstream) being their terminus for the rest of the year. Junks, however, are able to reach Lao-kai and even Man-hao in Yun-nan (55 miles farther up-stream) at all seasons. The river is 656 ft. wide at Lao-kai.

The volume of traffic on the river can be gauged by the following figures:

At Hanoi in 1913 3,500 river vessels<sup>1</sup> and 20,000 junks entered and cleared. The Chinese Maritime Customs returns at Meng-tse in Yun-nan give 3,151 junks (of 4,069 aggregate tonnage) entered and cleared in 1914. The junk traffic with China has decreased considerably since the opening of the Hanoi-Yun-nan-fu Railway, the figures for 1905 showing 10,342 junks with a tonnage of 31,708. The time occupied by the voyage up-stream from Hai-fong to Lao-kai is 5 days (there

<sup>1</sup> *Chaloupes*, a word used in the French returns in a comprehensive sense, including launches, barges, and large sailing-boats, but always distinct from the Chinese junks and sampans



is no travelling by night) for steamers; from Hanoi to Lao-kai 2 months for junks.

The Red River receives two large tributaries in the neighbourhood of Vietry, about midway between Hanoi and Yen-bai, viz. the Clear River on the left bank and the Black River on the right. Both are liable to extensive rises in the high-water season, during which they are both navigable for about 56 miles from Vietry, the former up to Tuyen-kwang and the latter to Cho-bo.

In the low-water season the Clear River is navigable to Phu-doan only.

(ii) One arm of the delta leaves the Red River about 20 miles above Hanoi, but the main network spreads out lower down, forming a complex system of waterways supplemented by canals and reinforced on the north by the River Thai-binh with its numerous mouths. Unlike the Red River, the Thai-binh is not subject to heavy floods, and its depth varies little except from the tides. It is navigable for vessels of 13 to 14 ft. draught. But the inland traffic in the waterways of the delta is carried on chiefly by launches, river steamers, junks, and sampans, and almost all the waterways are navigable for these at all seasons.

Hanoi, Hai-fong, and Nam-dinh are the chief centres of this river traffic. There are regular steamer services between the most important towns of the delta, and up the Clear River and the Black River as far as these are navigable.

Of the many mouths of the delta rivers the majority are impeded by shoals. The Kwa-dai, one of the deepest, only admits vessels of 9 ft. draught at high-water springs; but there is plenty of water within the bar and this is used as a route to Hanoi. The Kwa-kam, formerly the main outlet and leading to Hai-fong, has now shoaled so much that only light-draught

vessels can use it, and the main outlet is now through the Kwa-nam-trieu.

*Annam.*—The rivers in Annam are for the most part dry in the dry season and torrents during the rains. The most important is the Song-ka, but it is only navigable for 10 miles from the mouth, and the bar only admits vessels of 10 ft. draught at high tide. There are, however, numerous short stretches of natural waterways (said to total 1,490 miles) and about 370 miles of canals which are navigable for junks and sampans at all seasons.

*The Mekong System.*—The remaining waterways of Indo-China are comprised in the Mekong system, of which a general outline is given above, p. 5. For further details it may be conveniently divided into three parts: (i) from the northern boundary of Indo-China to Kratie in Cambodia; (ii) from Kratie to the delta; (iii) the delta system.

(i) In the high-water season (July to November) the Mekong, swollen by the melting of mountain snows and by the seasonal rains, assumes enormous volume. In the low-water season it shrinks to relative insignificance. In general the length from Vientiane (about 900 miles from the sea) to Kratie (270 miles from the sea) is always navigable for vessels of about 3 ft. draught in a series of reaches which are separated by stretches of difficult and sometimes impracticable rapids. Launches can reach Luang-Pra-bang (250 miles above Vientiane) in the high-water season, but as a rule this stretch is only practicable for junks and sampans. The main navigable reach is from Vientiane to Kemmarat, below which to Pak-moun are 75 miles broken by rapids and only navigable by shallow launches from May to August and from October to January. After this is the Bassak Reach, ending in the formidable rapids of Khon, which have, however, been

circumvented by four miles of railway crossing Khon Island. The third reach, known as the Stung-treng, extends to the rapids of Sambor-Sambok, through which there is said to be a deep channel. About 10 shallow-draught launches of the Messageries Fluviales ply on these reaches, and a vast number of native boats. The only navigable tributary is the Se-moun, on the right bank, which can be used by launches for a very limited period of the year from Pak-moun to Ubon in Siam, above which place the channel is encumbered by rocks.

(ii) From Kratie (270 miles from the sea) the Mekong is navigable at all seasons for steamers of the Messageries Fluviales de Cochin-Chine, and forms the main artery of communication in Cambodia. It is joined at Pnom-penh (170 miles from the sea) on the right bank by the important branch leading to the Great Lake, which is itself fed by a number of small rivers. In the dry season this branch is navigable for steamers only as far as Kompong-chnang (62 miles); but in the high-water season (July to December) steamers can pass through the lake and on to Bak-prea, a distance of 170 miles, and for short distances up the principal rivers which flow into the lake. Sampans circulate freely at all seasons. The total length of waterways navigable for steamers in Cambodia in the high-water season is computed to be 735 miles. The number of river vessels (from 50 to 850 tons) registered at Pnom-penh is 64, and in addition twelve steamers of the Messageries Fluviales make regular journeys from Saigon through the Cambodian waterways. Cargo-boats from Singapore and Manila also come up to Pnom-penh.

(iii) At Pnom-penh the Mekong divides into the Upper Branch (Tien-kang) and the Lower Branch (the Bassak), both of which split up nearer the coast into a number of arms, forming the western side of the Cochin-China

delta. The eastern part of the delta is formed by the many mouths of the Vaiko and the Donnai rivers.

This delta region, which comprises the greater part of Cochin-China, is a great network of rivers linked by innumerable canals. The Mekong branches, the Vaiko and the Donnai (up to a point 6 miles below Bien-hoa), are all navigable for river craft. It is calculated that there are altogether 1,084 miles of navigable waterways of primary importance, with another 1,055 miles of secondary canals, which connect all the river branches and the principal towns.

Considerable sums are being spent annually on the maintenance and improvement of the canals and creeks, and the list of first-class waterways is continually growing. In 1913 there were 208 steamboats on the inland waters; the junks are numbered by thousands. The river traffic returns at Saigon for 1913 were 1,375 vessels with an aggregate tonnage of 244,721 tons.

There are seven main mouths of the Mekong, having 7 to 10 ft. of water on the bars at low-water springs, with a rise of 10 to 12 ft. at spring tides. The depths increase inside the bars, but navigation is only safe for those with local knowledge. The northern or Kwa-tieu mouth, leading to My-tho, is the only one in general use. In the eastern part of the delta the Song-ngo Bay, on the east side of Kan-gio Point, is the entrance of the main channel to Saigon (see p. 45).

### (c) *Railways*

*Railway System in general.*—The railway system of Indo-China may be said to date from 1898. Two short strips of narrow-gauge lines in Tongking and Cochin-China were all that existed before that year, when M. Doumer's programme was accepted by the French Government and a loan of 200 million francs was sanctioned for the carrying out of the most

urgent part of it. M. Doumer's ambition was to establish a great railway junction at Hanoi, from which lines would radiate north-west to Lao-kai and Yun-nan-fu, north-east to Lang-son and the border of Kwang-si, east to Hai-fong, and south to Saigon. From the trunk line, Hanoi-Saigon, branches were to be pushed out west through the mountains into Laos. The Saigon-My-tho line was to be reconstructed and extended to Vinh-long and Kan-tho, and further a line was to be built from Saigon to Pnom-penh in Cambodia and eventually extended to Battambang and linked up with the Siamese railways. A large part of this programme has either been completed already or is actually in process of being carried out, viz. :

- (1) Hanoi to Hai-fong, 64 miles.
- (2) Hanoi to Lao-kai, 184 miles.
- (3) Lao-kai to Yun-nan-fu, 288 miles.

Built under an eighty-year concession from the Chinese Government and opened in 1910. It passes through very difficult country and is much exposed to landslips. Serious interruptions have occurred almost every year since it has been open to traffic.

- (4) Hanoi to Lang-son, Dong-dang, and Nam-kwam on the frontier of Kwang-si, 104 miles.
- (5) Hanoi to Vinh, 202 miles.
- (6) Kwang-tri to Tourane, 109 miles.

(5) and (6) are sections of the Hanoi-Saigon trunk. Of the intervening space between Vinh and Kwang-tri (about 190 miles) it appears that all but 46 miles from Dong-hoi northwards was practically completed in 1914.

- (7) Nha-trang to Saigon with branch to Ksom-gon, 278 miles.

Parts of the branch line are still under con-

struction. The intervening sections (about 330 miles) between Tourane and Nha-trang, which would complete the Hanoi-Saigon trunk, are under consideration.

(8) Saigon to My-tho, 44 miles.

The total in 1914 was 1,273 miles in actual use, with an additional 154 under construction.

*Details of Construction.*—All the Indo-Chinese railways are single lines of metre gauge. Steam traction is used, and the fuel consists of coal briquettes and in some cases of wood. On the Hai-fong-Yun-nan-fu Railway there are several important bridges in the Tongking section, viz. over the Tam-bak (295 feet), over the Lai-vu (413 feet), over the Tai-binh (1,252 feet), the celebrated Pont Doumer over the Red River at Hanoi (5,518 feet), over the Clear River (971 feet), and over the Nam-ti river at Lao-kai (394 feet); there is also a viaduct at Hanoi 2,940 feet long. In the Yun-nan section the construction was extremely difficult, involving 155 tunnels and numerous bridges, galleries, and viaducts. The construction of the other railways did not involve many important engineering works. There are two tunnels and some small viaducts between Hué and Tourane, but otherwise there is nothing especial to note. The gradients as a whole are moderate, except in Yun-nan, where the line rises 3,600 feet in 38 miles with gradients in places of 1 in 40.

*Tramways.*—The French have built a number of tramways in populous districts :

(a) In the neighbourhood of Hanoi, with a total length of 15 miles. The receipts for January–August 1914 were at the rate of £686 per mile per annum.

- (b) From Kam-giang to Phu-ninh-giang, length  $26\frac{1}{2}$  miles. The receipts for 1913 were £139 per mile.
- (c) At Tourane, from the Ilot de l'Observatoire to Fai-fo, length  $16\frac{1}{2}$  miles. The receipts for 1913 were £51 per mile.
- (d) In the neighbourhood of Saigon, length  $26\frac{1}{2}$  miles. The receipts for 1913 were £1,200 per mile.

*Relation to Government.*—The capital for the construction of the Hai-fong-Yun-nan-fu Railway was found by (1) a French syndicate known as La Société de construction des chemins de fer de l'Indo-Chine, (2) the Compagnie des chemins de fer de l'Indo-Chine et du Yun-nan, (3) the Government of Indo-China, and (4) the French Government. The management is controlled by the Indo-Chinese Government through the Compagnie des chemins de fer de l'Indo-Chine et du Yun-nan. The remaining railways are exploited directly by the Indo-Chinese Government. There are no foreign railway concessions.

*Finance.*—The following figures will give some indication of the capital, gross earnings, and profits the various of lines:

<i>Miles open in 1914.</i>	<i>Railway.</i>	<i>Capital expended.</i>	<i>Gross earnings 1913.</i>	<i>Profit or loss 1913.</i>
		£	£	£
536	Hai-fong-Yun-nan-fu	9,230,060	312,043	+ 92,445
104	Hanoi-Nam-kwan	1,641,376	35,198	+ 7,910
202	Hanoi-Vinh	1,740,000	58,133	
109	Kwang-tri-Tourane	1,260,000	12,898	— 8,514
278	Nha-trang-Saigon	2,560,000	35,074	+ 14,191
44	Saigon-My-tho	465,362	33,117	
<i>Totals</i>	<i>1,273</i>	16,896,798	486,463	+ 106,032

The aggregate profits of all the railways rose steadily from £24,419 in 1909 to the above figure in 1913.

They were well maintained in 1914, but fell considerably in 1915 owing to the effects of the war.

*Tariffs.*—Though merchants complain that the tariffs on the Indo-Chinese lines are so high as to hamper trade, in comparison with those of other French colonial railways they appear to be moderate.

On the Hái-fong-Yun-nan-fu Railway they are graded according to four zones, the third and fourth zones being more costly owing to the difficulties of the country. Passenger tariffs on this line vary from  $12\frac{1}{2}$  centimes per km. to  $16\frac{1}{4}$  for first class, from  $8\frac{3}{4}$  c. to  $11\frac{1}{4}$  for second class, from 5 c. to  $6\frac{1}{4}$  for third class, and from  $1\frac{3}{4}$  c. to 2 for fourth class. On the northern group of the Indo-Chinese railways, Hanoi-Nam-kwan and Hanoi-Vinh, which are under direct Government control, the passenger tariffs for the four classes are  $17\frac{1}{2}$  c.,  $8\frac{3}{4}$  c., 5 c., and  $1\frac{3}{4}$  to  $1\frac{1}{2}$  c. per km.

The tariffs for goods vary widely according to the distances traversed and the nature of the article carried, but statistics published in 1910 showed that the average cost per ton per km. was 11.4 c. on the Hai-fong-Yun-nan-fu Railway, 10 c. on the Hanoi-Nam-kwan, and 3.8 c. on the Hanoi-Vinh. The remaining railways conform more or less closely to the Hanoi-Vinh group.

*Adequacy to Economic Needs.*—The railways at present are fully capable of meeting economic demands. Indeed it is only the Hai-fong-Yun-nan-fu and Saigon-My-tho lines which are really remunerative. The completion of the general system, however, would doubtless bring an expansion of trade, and the following projects are under consideration :

Surveys have been made for a line from Saigon to Pnom-penh and on to Battambang and the Siamese frontier, to link up eventually with the Siamese railways at Bangkok ; a line from Kwang-tri in Annam



to Savanakhet on the Mekong; and a line on the right bank of the Mekong from Savanakhet to Kompong-chnang in Cambodia.

There are, besides, various schemes for railway extension in China, e. g. to continue the Yun-nan-fu Railway northwards to the Yangtse and the province of Szechwan, and eventually to link it up with the North China systems; and to connect Kwang-chow-wan and Tongking by a line through Nan-ning to the Hanoi-Nam-kwan railway.

(d) *Posts, Telegraphs, and Telephones*

An efficient postal service under French supervision has been established throughout Indo-China. In 1914 there were 8,719 miles of telegraph wires and 376 telegraph offices. Urban and inter-urban telephone service is installed in the most important districts.

(2) EXTERNAL

(a) *Overland and River Routes*

The external communications of Indo-China by road, river, and railway are of limited scope, and have been for the most part already enumerated as continuations of some of the main lines of internal communication. They are concerned with China and Siam, principally the former, and with regard to China the provinces of Kwang-si and Yun-nan are chiefly affected.

*Kwang-si.*—The old mandarin road crosses the border of Tongking and Kwang-si at Nam-kwan and runs thence to Lung-chow and Nanning, two treaty ports on the Tso-kiang and Yu-kiang (West River). This road is kept in good order in Tongking, and even in China it is undergoing improvement and can now be used for wheeled traffic most of the way to Lung-chow. A certain amount of river traffic in sampans and rafts crosses the border in this region on the upper waters

of the Tso-kiang, which divide into two rivers just above Lung-chow. One of these rivers passes Kao-bang, and the other, the Red River, passes Nam-kwan and is navigable for sampans as far as Na-cham. An extension of the Hanoi-Nam-kwan Railway by way of Lung-chow to Nanning, from which point the Tso-kiang is navigable for launch traffic, would open the rich basin of the Tso-kiang to French trade, but hitherto the Chinese Government has obstructed all plans in this direction. Lung-chow is about 18 miles from the Tongking frontier, and Nanning about 95 miles from Lung-chow.

*Yun-nan.*—The mountain roads leading from Tongking and Laos into Yun-nan are mere tracks suitable for mule traffic. That leading from Lao-kai to Meng-tse (112 miles) and Yun-nan-fu (290 miles) is now largely superseded by the railway. The path from Upper Laos leads into Yun-nan farther west, passing the treaty port of Sze-mao, a centre of the cotton and tea trades. The distance from Muong-sing, near the border of Laos, to Yun-nan-fu is 360 miles, a journey of 18 to 20 days for caravans.

The only navigable water-route into Yun-nan is by the Red River, and that is only practicable for junks as far as Man-hao, 55 miles above Lao-kai.

The only good medium of communication between Indo-China and Yun-nan is the railway which runs from Hai-fong to Yun-nan-fu. At mile 112½ from Lao-kai it reaches Pi-che-tchai, the station nearest Meng-tse, and a branch line is being built from this point to Meng-tse (7 miles) and to the tin mines at Kochiu (about 34 miles). The chief articles of export carried by it from China are metals, cunao, hides, and tea. In 1915 it carried 1,848,746 passengers and 197,464 tons of goods. The contemplated extensions of the line north into Sze-chwan, and onwards to join the Manchurian systems, would give it very great importance both

political and economic, and would immensely increase the trade of Hanoi and Hai-fong. The journey from Hanoi to Lao-kai occupies 12 hours; and that from Hanoi to Yun-nan-fu about 47 hours, no travelling being done at night.

*Siam.*—The main line of communication between Indo-China and Siam is the road which runs from Pnom-penh through Battambang and Sisophon to the Siamese frontier and on to Bangkok. The distance from the frontier to Bangkok is about 135 miles as the crow flies.

The Se-moun river admits of launch traffic for a limited period of the year from Pak-moun to Ubon, a distance of about 50 miles.

### (b) Ports

In the long coast-line of Indo-China there are numerous small harbours used by junks and coastwise traders, but there are only two first-class ports, Hai-fong and Saigon, both in delta country and situated some distance from the open sea. At both of these towns the dock and wharfage accommodation is undergoing extensions and improvements.

*Hai-fong* is 22 miles from the sea, but vessels can come up the channel at low water if they do not draw more than 24 ft. The main wharf has a frontage of 600 yds. ; there is 27 ft. of water alongside at low tide, and there are four berths for ocean steamers. There are, besides, five secondary wharves, and quays for river boats, as well as a patent slip, 130 ft. long, with lifting power of 400 tons, and a floating dock (200 ft. long and 73 ft. wide at entrance) with lifting power of 1,500 tons. The shipbuilding firm of Marty has workshops here, where vessels of over 300 tons capacity are built and repairs to ships and machinery can be effected. There are eight large warehouses.

Outside this port, in the bay of Along, ships can anchor in safe shelter.

*Saigon* ranks among French ports between Boulogne and Bordeaux in importance. It lies up the Saigon river, a branch of the Donnai, 40 miles from Cap St. Jacques. The entrance to the channel is on the east side of Kan-gio Point. Besides valuable naval equipment, it has quays 1,128 yds. long, with a depth alongside ranging from 19 to 32 ft. ; several wharves, that of the Messageries Maritimes being 437 yds. long ; two dry docks, the largest being 545 ft. long and 68 ft. wide at entrance ; a floating dock (400 ft. by 66 ft.) capable of lifting 1,000 tons ; a slip (167 ft. by 10 ft.) ; several large warehouses ; and other facilities for shipping. The Government machine shops are capable of doing all kinds of work, and the ship-building shops of the Messageries Fluviales also undertake heavy repairs.

Of the secondary harbours the most important are Tourane, Hon-gay Bay, and Ben-thuy. *Tourane*, in the centre of the Annam coast, is situated in a large bay, which is sheltered on the sea side by the peninsula of Tien-cha. The bay, however, is shallow and ships have to lie at the entrance of the anchorage, which is connected with the harbour by a dredged channel only 10 ft. in depth. There is a wharf 200 ft. long in the Tourane river.

*Hon-gay Bay* (or *Port Courbet*) is the port of the Hon-gay coal-mines, and has a large traffic in coal-boats. It is approached by a channel 16 ft. deep, and has two wharves (260 ft. and 230 ft. long) with a depth of 24 ft. alongside.

*Ben-thuy* is a harbour in northern Annam, 10 miles from the mouth of the River Song-ka, and is accessible to vessels of 10-ft. draught at high tides.

Navigation in general in the Indo-Chinese waters is

affected by the monsoons (see p. 6), and is rendered difficult by the frequent typhoons and storms during the summer months, and especially in September.

(c) *Shipping*

The total sea-going traffic of Indo-China in 1914 consisted of 4,389 ships, with an aggregate tonnage of 4,741,504 tons, entered and cleared. Of these, 2,102 (tonnage 56,264) were junks, mainly Chinese. The number of ships sailing under the French flag was 624 (tonnage 1,441,343), and of the remainder British, Japanese, and Norwegian shipping formed the chief part. By far the largest portion of the total trade was done with Hongkong, Singapore, Chinese ports, Siam, and the Dutch East Indies. American shipping showed a remarkable increase in the returns for 1915.

At Hai-fong in 1914, 700 vessels (tonnage 951,643) entered and cleared, carrying goods amounting to 504,698 tons, of which the French lines, Messageries Maritimes and Chargeurs Réunis, carried 64,164 tons. At Saigon in 1913, 1,322 vessels (tonnage 2,979,726) entered and cleared in external trade. At Hon-gay in 1913, 231 vessels (tonnage 301,845) entered and cleared, presumably in the coal trade.

There are regular services from Saigon to Hai-fong, Shanghai and other Chinese ports, Yokohama, Manila, and Singapore, and to Europe by the Messageries Maritimes, the Chargeurs Réunis, the Peninsular and Oriental, and (before the war) the Norddeutscher Lloyd. There is also a large traffic by cargo boats of various nationalities with the ports of China, Siam, the Dutch East Indies, and the Straits Settlements.

*Coastwise Traffic.*—The coastwise traffic carried on by steamers, junks, and sailing-boats is very considerable, but as it is usually included with river traffic in the general returns the exact figures are not easily assessed.

The returns for Hai-fong in 1914 showed that 30,117 tons of exports and imports were carried in the coastwise trade ; the coastwise traffic of Hon-gay amounted to 3,701 boats (tonnage 269,659), and that of Ben-thuy to 1,237 boats (tonnage 72,650).

The coast trade of Saigon is very active ; figures for 1913 give 814 steamers and sailing ships (tonnage 916,349) and 4,683 junks (tonnage 80,373) entered and cleared.

A regular coastal service by the Messageries Maritimes and the Chargeurs Réunis plies between Hai-fong and Saigon, calling at Tourane and sometimes at Nha-trang and Kwi-nhon ; junks and small steamers traffic between the various ports along the coasts of Tongking, Annam, and Cochin-China ; and launches ply between the ports of Tongking and North Annam. The Messageries Maritimes have a coastwise service in the Gulf of Siam between Saigon, Ha-tien, Chantaboun, and Bangkok.

#### *(d) Telegraphic and Wireless Communications*

There are wireless stations at : (1) Bachmai, close to Hanoi, open to the public, normal range 1,000 nautical miles ; (2) Kien-an, 1 mile south-west of the Observatory at Hai-fong, open to the public, normal range 350 nautical miles ; (3) Tourane, normal range about 300 miles ; (4) Cap St. Jacques, open to the public, normal range 2,800 miles ; (5) Kwang-chow-wan, normal range 500 nautical miles. They are all controlled by the Government of Indo-China. Cables are laid from Saigon to Singapore, Pulo-Condore Islands and Pontianak, Hongkong, Tourane, and Hai-fong ; and from Tourane to Amoy, Hongkong, and Manila. It is proposed to lay a cable from Hai-fong to Macao.

## (B) INDUSTRY

### (1) LABOUR

The Annamese, who form about four-fifths of the population, are intelligent, industrious, and docile. From an industrial point of view they are superior to all the neighbouring races, and can easily be taught to deal with machinery. Unfortunately, they rarely attach themselves to an employer, but leave without any consideration for the work in progress, as soon as they have amassed enough savings. Though eager for gain they are not speculative or enterprising in their undertakings, and they are hostile to all innovations which do not offer a material and immediately appreciable result. They require close supervision in their work, as their chief aim is to get the maximum of profit by the minimum of labour. As agriculturists, however, they are indefatigable workers, and their careful methods enable them to exploit the more unfertile districts. Many of them are skilled and artistic workers in embroidery, carving, jewellery, and similar crafts.

In the large towns industrial schools have been established, and the pupils supply the factories, business houses, and plantations with the native labour which is indispensable in a country where Europeans cannot be employed on manual work. On the other hand, the natives have no factories of their own, but work at home, or at most two or three together in a small workshop. Formerly the workers belonged to guilds; these were suppressed in 1841, but the various trades continued to a great extent to live in definite groups.

The great number of Chinese immigrants in the country is remarkable, and even more striking is their importance. They form an essentially temporary part

of the population, as they always aim at returning eventually to their own country. Yet they have monopolized all the small trades, some of the larger trades, and various industries. They lend money at high rates to the natives at seed-time, and in some parts of the country half the rice swamps are in the hands of Chinese mortgagors. In the agricultural districts of Cochin China and Cambodia, and also in the mines in the north of Tongking, Chinese have been brought in in large numbers to reinforce the native labourers. In general, the Chinese work harder, but they are more exacting than the Annamites. They form very closely knit colonies, and in the large towns they live in special quarters.

The average wages paid to coolies are 20–30 cents a day, in Cochin China 30–40 cents. Skilled workers, such as masons, carpenters, &c., get 30 cents to 1 piastre a day. The rates of pay for the Chinese are slightly higher. Women coolies get 15 cents, children 8–10 cents. Chauffeur mechanics, who are almost all Chinese, get 58–70 piastres a month. They all find their own food. Although such wages appear low, native labour is not really much cheaper than labour in Europe, except on piece-work, if the quality and quantity of work done is taken into consideration.

## (2) AGRICULTURE

### (a) *Products of Commercial Value*

*Vegetable Products.*—Rice is by far the largest product of the country, and not only satisfies the requirements of the population, but provides a large proportion of the exports. Cotton is grown in large quantities in Cochin-China and Cambodia, and also gives good results in Laos. Tea, of which there are a certain number of plantations in the highlands of Tongking and Annam,



grows wild in Upper Laos. Other cultures are rubber, sugar-cane, coffee, ground-nuts, beans, pepper, sesame, jute, indigo, and tobacco, besides gums and vegetable oil, and medicinal plants such as cinnamon, cardamoms, and areca-nut.

*Rice.* The delta lands of Tongking and Cochin-China, the borders of the Cambodian lakes, and the coastal regions of Annam are the only parts of Indo-China which are really cultivated, and these are almost entirely under rice. The extent of the rice lands in 1911 in Cochin-China and Tongking was estimated at about 3,400,000 acres in the former and at 2,000,000 acres in the latter. The land under this culture might be considerably extended in Cochin-China, Cambodia, and Laos, and to a less degree in Annam and Tongking; but it is not easy to persuade the Annamese to move from their homes, especially to the higher lands, where new ground might be broken.

Two rice crops are obtained yearly in Tongking and North Annam; two sometimes in Central Annam; and one only in South Indo-China. Statistics for 1915 show that 1,373,239 tons were exported from Indo-China, of which Cochin-China contributed about 1,000,000 and Tongking about 230,000. The largest amount exported in any year was 1,428,121 tons in 1914.

*Other cereals* are grown to a very limited extent and are consumed locally, maize alone (chiefly grown in Tongking) providing a surplus for exportation. In 1915 the export of this grain amounted to 62,989 tons; the largest export for any year was 133,273 tons in 1913.

*Other Crops.* The export of pepper, which is grown in Cambodia and Cochin-China, amounted to 4,243 tons in 1915; of cotton, grown in small quantities everywhere, to 3,740 tons (highest export, 9,893 tons in 1913); of sugar-cane from Annam to 5,506 tons; of tea from Annam and Tongking to 947 tons; of coffee from

Tongking to 357 tons ; and of rubber, most successful in Cochin-China, to about 375 tons. All these cultures might be profitably developed with a view to the European market, especially Cambodian cotton, which is of high quality, rubber, and beans and sesamum for their oil-products. There is an abundance of rushes for matting in Cochin-China, and experiments prove that ramie grass and jute could be cultivated, but at present little progress has been made with them.

The cultivation of *vegetables* and *fruit* is very general, and almost all the European growths have been successfully acclimatized. In 1915 166 tons of fresh fruit and 368 tons of preserved fruit were exported.

*Animals and Animal Products.*—The buffalo, which is found wild in Laos, has been domesticated in the agricultural districts, and the zebu bull is used for transport purposes. Stock-rearing flourishes in a few districts, and there is an indigenous race of horses, of small size but excellent. Attempts to acclimatize the Arab horse and sheep from Aden and China have not been successful. Pigs thrive everywhere. The rivers and the Cambodian lakes abound in fish, and dried and salted fish from them and from the coasts form an important item of export trade. The silk-worm may be said to be indigenous in Tongking, where there are several thousand acres of mulberry-trees. Varieties of mosquitoes, ants, and leeches combine to make the forests bordering on the Mekong impracticable, and peculiar species of grubs and caterpillars destroy the cotton and coffee plantations of Cochin-China.

Large tracts of the upland country of Indo-China offer favourable conditions for stock-rearing, especially the plateaux and certain provinces in Annam, Upper Tongking, parts of the Mekong valley, and Cambodia ; and there is no doubt that an important industry might

be developed, though at present the number of cattle is not large in proportion to the population of the country.

The Government statistics for 1916 give the following numbers of existing stock :

<i>Oxen.</i>	<i>Cows.</i>	<i>Calves.</i>	<i>Buffalo-species.</i>	<i>Pigs.</i>
634,526	523,553	289,939	1,583,712	2,662,534

Cambodia and Laos have the largest proportion of the bovine species, the buffaloes being largely used for agricultural purposes and for cartage. Horse-breeding flourishes in Gia-dinh (Cochin-China), Phu-yen (Annam), and in Tongking. A small number of sheep are grazed in Cochin-China and in the Bao-lak districts in Tongking. Pigs are kept everywhere, but Tongking has the largest number.

The export trade, which is capable of expansion, amounted in 1915 to 15,954 head of cattle (the highest number, 33,799, was reached in 1911) and 57,346 pigs.

Poultry are kept everywhere. Besides supplying local needs, they are likely to become a considerable article of export.

*Sericulture* is very general throughout Indo-China, but hitherto the methods of the natives have been quite unscientific and the quality of the raw silk poor. The country, however, is very suitable for this culture, and improved methods to which the French are paying attention should give important results. The export of raw silk in 1915 was 55 tons, the highest amount of any year being 100 tons in 1910.

#### (b) *Methods of Cultivation*

The French have done, and are doing, much to regularize and extend production by irrigation and drainage schemes destined to combat the drought and floods which have proved disastrous in the past ; and they are endeavouring to improve the primitive methods

of cultivation employed by the natives. The land is divided up into very small holdings, and the natives are very conservative in their habits and adhere to the implements used by their ancestors; but the French are gradually showing them the value of more modern methods, and the Annamese are intelligent and capable of being taught. In the delta lands the natives have relied chiefly on the alluvial deposits of the floods to enrich the soil, with the help of any organic manures that are available. The French colonists are experimenting with chemical manures, and are introducing the natives to their use.

*Irrigation.*—Considerable irrigation and drainage works have been undertaken by the French to regulate the supply of water from the rivers for agricultural purposes. This has been especially the case in the Tongking delta lands, where some 750 miles of embankments protect the low-lying lands from the Red River floods in the season.

In the province of Bak-giang (Tongking) the Kep canal makes the water of the Song-thuong available in the dry season for a large area of rice land; and in the same province a system of sluices permits the irrigation or drainage of a large area between the Song-ka and Song-thuong. Drainage and irrigation in the Kim-son district of the province of Ninh-binh (Tongking) have made two crops of rice possible instead of one. The reclamation by drainage of the Plaine des Jones in Cochin-China was an important work, but there is a vast amount of work still to be done in these directions throughout Indo-China.

### (c) *Forestry*

The total forest area of Indo-China has been roughly estimated at about 60 million acres, containing all kinds of tropical growths. In Tongking and Cochin-China

much harm has been done by unscientific exploitation, but there still remain fine forest areas in the hilly parts of Cambodia, Laos, and southern Annam, which should prove valuable when the difficulties of labour and transport are overcome and proper attention is given to their development. At present the actual yield of forest products can hardly be estimated, only the export figures in a few cases being available. Those for the year 1915 are given below in brackets, where possible.

A considerable amount of timber is cut and floated in rafts down the Mekong and dealt with in the saw-mills which form a prominent industry in Cambodia. Bamboo canes, teak (2,000 tons), and hard woods for marqueterie, &c., and timber for building purposes are produced to meet general requirements, but a very much larger export trade might be developed, if full advantage were taken of the great demand for woods of all sorts in China. Moreover, the bamboo, which is already used in numerous industries from building to the manufacture of hats, is likely to prove valuable in the paper-making industry also. The coco-nut palm and pine-apple plant are found in the southern regions of Indo-China, and coco-nut oil (280 tons), fibre, and copra (7,864 tons) are produced from the former. Other forest products are gums of various kinds, lacquer and oils (1,542 tons), benzoin, resin, *cunao* roots (7,334 tons), castor-oil (500 tons), cardamoms and amomums (440 tons), cinnamon (380 tons), areca-nut, and *palétuvier* bark for tanning. For many of these there is a growing demand in the European market.

#### (d) *Land Tenure*

The tenure of the land is either in the hands of the natives who pay a tax as rent to the State, or in the hands of French colonists, who have received concessions amounting in 1909 to a total of considerably over

1,000,000 acres. The concessionaires lease the land to natives, providing them with the necessary materials for agriculture and receiving in return a percentage of the products.

### (3) FISHERIES

The fishing industry occupies a large population in Indo-China, the chief centres being the Gulf of Tongking, the south coast of Annam, and the lakes of Cambodia. An immense bank covering 18,500 sq. miles of the Gulf of Tongking, with an average depth of 98 ft., is the fishing-ground for 50,000 individuals in Tongking and Annam, but the surplus production of fish comes from the south, mainly from Cambodia, as is shown by the returns of the export trade. In 1914 fish products, chiefly dried and salted fish, were exported from Saigon to Hongkong, Singapore, and Siam to the value of £668,000. The salting and drying of fish, which are large industries in Cambodia, Cochin-China, and Annam, are mainly in the hands of Chinese and Annamites. The manufacture of fish-oils for the European market is capable of development.

### (4) MINERALS

There is no doubt that the mineral resources of Indo-China are considerable; but, except in Tonkin, they have hitherto been neglected, owing largely to deficiency of communication and transport. The mining concessions in 1913 were distributed in the following proportions: Tongking 26 units, Annam 3.3, Laos 0.8, Cambodia 0.7, Cochin-China 0.3. Concessions are not granted to foreigners.

*Coal.*—Tongking is rich in coal deposits, which are mined in the provinces of Kwang-yen, Hai-duong, Thainguyen, and Nam-dinh. By far the most important coal-fields are those at Hon-gay in Kwang-yen. They cover

54,000 acres, in which nine principal seams are worked by 5,400 Annamese and Chinese coolies under the superintendence of 60 whites. The coal is of anthracitic nature, and much of it is mixed with bituminous coal from Japan and made up into briquettes. It is used in all the industries of Indo-China. The production in 1913 amounted to 371,145 tons, of which 220,195 tons were exported, and in 1915 to about 600,000 tons, or about 80 per cent. of the total production of Indo-China. The mines are connected by tramway with the coal wharves of Hon-gay Bay (see p. 45).

The coal-fields of the island of Kebao, north-east of Hon-gay, cover an area of 61,000 acres. They had been neglected for some years, but in 1913 were being exploited to the extent of 13,322 tons and are likely to be of importance in the future. They are served by Port Wallut harbour.

Two coal-fields near Dong-trieu, in the province of Hai-duong, have an area of 3,140 and 1,792 acres respectively, and produced 61,500 tons of anthracite in 1913. They are served by river transport.

In Central Annam there is an important coal-field near Nong-son on the Tourane river, covering 7,500 acres; it produced 13,000 tons of anthracite in 1913. The field is served by barges on the Tourane river.

*Iron.*—Rich deposits of iron ore, mainly hematitic, are reported in Indo-China, though little or nothing has been done as yet towards exploiting them. The most important are in the Pnom-deck in Cambodia, at Kwang-tri in Annam, and at Thai-nguyen, Yen-the, and Mo-ksat (near Kao-bang) in Tongking. The deposit of Ku-van (Thai-nguyen) is being worked in a rudimentary fashion and 100 natives are employed; there is also a primitive foundry there. The development of the iron industry in Tongking is worthy of attention.

*Tin and tungsten* are mined in seven concessions in

the province of Kao-bang (Tongking), which produced 197 tons in 1913.

*Zinc*.—There were nine concessions for zinc-mines in Tongking in 1913, producing 33,438 tons, one-third of which was mined at Trang-da, Tuyen-kwang, on the Clear River. A modern installation for calcining zinc in Tongking is contemplated.

*Other minerals*.—*Antimony* is found on the frontier near Mon-kay (882 tons exported in 1911), and *manganese* at Dong-trieu (450 tons exported in 1913). *Copper* has been found near Vien-tiane and Savanakheth in Laos, and lead at Lang-son and Mon-kay in Tongking. Traces of *gold* have been seen in many parts in Laos and Annam, and a claim of 2,500 acres is being worked at Bong-mieu (Kwang-nam, Annam), which employs 440 coolies and produced 3,857 oz. of gold in 1913.

Statistics are not available as to the depth of the various mines or the extent of undeveloped mineral resources.

Mention should be made of the *calcareous deposits* in Tongking, particularly on the Ile des Deux Song near Kwang-yen, which are used in the manufacture of cement, and of *plastic clays* and *kaolin* used in pottery and porcelain manufacture. *Granite* is quarried at Gia-dinh, Long-ksuyen, and Chab-dok; and *laterite* at Bien-hwa in Cochin-China.

The supply of coolies for the mines has been sufficient hitherto, but the large number of additional workers, which the growth of the coal-mines bids fair to require, may prove difficult to find.

## (5) MANUFACTURES

The Annamese are industrious and clever craftsmen, and the French have found them apt workmen in the various manufactures which they have introduced. The native manufacturing industries are chiefly weaving,



mat-making, pottery, paper-making, wood-carving, incrustation of woodwork, and the making of furniture, all of which are carried on by individuals and on a small scale. The French have introduced a number of modern manufactures, and have set up well-appointed factories for them.

*Machinery and Metals.*—Metals are not at present manufactured on a large scale. Machine shops and shipbuilding establishments exist at Hai-fong and Saigon (see pp. 44, 45), and shops for boat-building and motor repairs at Kan-tho in Cochin-China. There are important railway machine shops at Gia-lam, near Hanoi.

*Textiles.*—Silk-spinning and weaving are carried on in large factories at Thai-binh and Nam-dinh in Tongking, at Binh-dinh in Annam, and at various places in Cochin-China. The considerable matting industry at Phat-diem and Thai-binh has suffered severely during the war. The textile industries are capable of further extension in connexion with the development of cotton and silk culture. At present there are only a few mills dealing with raw cotton at Khsach-kandal in Cambodia.

*Miscellaneous.*—The principal factories are located in Tongking and Cochin-China. In Tongking the chief manufactures are those of briquettes at the coal-fields at Hon-gay; cement at Hai-fong; distillery products at Hanoi, Hai-fong, and Nam-dinh; tiles, bricks, and pottery at Hanoi and Dap-kau. There are, besides, breweries, printing works, tobacco factories, match factories, tanneries, and ice factories at Hanoi and Hai-fong; a button factory at Hanoi; a soap factory at Hai-fong; paper-mills at Dap-kau; potteries at Ba-trang, and porcelain and faience works at Mao-khe (Hai-duong) and Mon-kay. In Cochin-China, Saigon and Cholon have saw-mills, distilleries, breweries, tile

and brick-works, and a match factory ; and there are saw-mills, dye-works, and brick-works in other parts.

There are nine rice-mills at Cholon and Saigon, each capable of turning out from 450 to 900 tons of rice a day, and other rice-mills are established at My-tho and Rach-gia in Cochin-China.

The tanning and paper-making industries would acquire considerable importance if improved methods were adopted.

Sugar-refining is practised to a limited extent in Cochin-China.

The manufacture of salt from salt-pans on the coasts of Annam and Tongking and at Baria and Bak-lieu in Cochin-China has attained considerable importance and is capable of further extension.

In Cambodia there are numerous saw-mills which deal with the timber coming down the Mekong in rafts. These are situated near Chlong and at various points on the river, and there are a number at Pnom-penh. Pottery is made at Kompong-chnang.

In Annam there is a match factory at Ben-thuy, and an ice factory and perfumery at Hué.

There are no manufacturing industries of any account in Laos, owing to the undeveloped state of the country.

#### (6) POWER

Electric lighting and power stations have been erected at Hai-fong and Hanoi in Tongking, and at Saigon and My-tho in Cochin-China. Little use seems to have been made as yet of the water-power of the large rivers for generating electricity, but there is a power station at Chuy-chanver in Cambodia, on the right bank of the Mekong, which is used by saw-mills, and it is proposed to use a fall in the Canal Principal in Thanh-hoa to generate electric power for irrigation works.

### (7) STATE CONTROL OF NATURAL RESOURCES

The administration of the countries which compose Indo-China is entrusted to the Residents Superior, who are answerable to the Governor-General. Assisted by Chambers of Commerce and Agriculture, these provincial governors exercise a wide control over the natural resources of the country. Concessions are made by them to colonists for agricultural purposes; and the concessionaires are responsible for the exploitation of the land by native labour, paying a percentage of the profits to the State and rewarding the natives by a proportion of the produce. These concessions in 1909 amounted to more than 1,000,000 acres. Much of the cultivated ground has long been in the hands of the natives, whose possession is not as a rule disturbed, and the State has exercised very little control over these lands. But the large tracts of forest and undeveloped country, more especially in the mountainous regions, are assigned, as occasion arises, to prospective colonists by the Government, which can exercise a thorough control over their development. Moreover, the development of communications and of irrigation and protective works is in the hands of the State, which is thus able to regulate the exploitation of important areas. Mining concessions are granted by the Government, and all applications are carefully scrutinized. The State has founded several permanent institutions for scientific research in agriculture and forestry, and every assistance is given to the colonists.

The chief error in the past has been a too exclusive concentration on the cultivation of rice, to the neglect of the many other possibilities of the country. Under a wise administration and with a more liberal allotment of capital it should be possible in future to exploit in a profitable manner the great and varied

resources in forestry, minerals, and agriculture which Indo-China undoubtedly possesses.

## (C) COMMERCE

### (1) DOMESTIC

The internal trade of Indo-China in 1915 was valued at £8,646,432, the average for the five years 1910-14 having been £8,239,294.

#### (a) *Principal Branches of Trade*

The principal articles of trade in 1915 were: rice and maize; flour; preserved foods; cheese, butter, eggs; cattle and meat; fish products, dried, salted, and fresh fish; vegetables and fruit; alcohol, wine, and beer; salt, sugar, pepper; medicinal plants, areca-nut, cinnamon, amomums and cardamoms; tea, tobacco, copra, opium; *cunao*; bean oil; manure; petrol; coal; common wood and hard wood; cotton, silk, cotton thread, silk tissues, clothing, sacks, and mats; pottery, glass, paper, metalwork, furniture; matches; engineering materials; sand, flint, lime, cement, bricks, and tiles; raw and prepared hides.

The chief of these in order of value are fish products, rice, silk tissues, coal, pottery, opium, and matches.

#### (b) *Towns, Markets, and Fairs*

The chief markets and centres of exchange are:

*Tongking.* Hai-fong and Hanoi for general trade; Nam-dinh for rice; Bac-ninh for embroideries; Dap-kau, Hai-duong, Hung-yen, Ninh-binh, Son-tay, Phu-lang-thuong, and Lang-son for local industrial and agricultural products.

*Annam.* Hué, Tourane, Vinh, Thanh-hoa, Kwi-nhon, Binh-dinh, and Fai-fo.

*Cochin-China.* Saigon and Cholon for rice and general trade; Baria for salt; My-tho, Sadek, Bien-hoa, Vinh-long for rice and local trade.

*Cambodia.* Phnom-penh, a busy commercial town; Kratie, a port on the Mekong; Kampot, a market for pepper; Battambang, an agricultural centre.

*Laos.* Vien-tiane, Luang-Prabang, Savanakheth, Attapeu, Bassak, and Pak-se are all markets for local trade. At certain times of the year temporary markets or fairs are set up at convenient places along the Mekong.

### (c) *Organizations to promote Commerce*

There is a Director-General of Agriculture, Forests, and Commerce for Indo-China; and there are Chambers of Commerce at Saigon, Hanoi, and Hai-fong, and a United Chamber of Commerce and Agriculture of Annam and Cambodia at Tourane.

### (d) *Foreign Firms*

American or European firms operating directly in Indo-China are very few, being limited to the Standard Oil Co., the Eastern Telegraph Co., and a few banks and agencies in Hanoi, Hai-fong, and Saigon. The Chinese, however, are well represented, notably in Laos, where they frequently transact business for the European houses established at the seaports.

## (2) FOREIGN

### (a) *Exports*

*Quantities and Values.*—The value of the exports of Indo-China in 1915 totalled £11,449,572, of which goods to the value of £2,426,088 went to France and her colonies, and the remainder, to the value of £9,023,484, to foreign countries.

The following table shows the principal articles of export in 1915:

<i>Description.</i>	<i>Amount.</i>	<i>Value.</i> £
Amomums and cardamoms	969,812 lb.	
Antimony	630 tons	
Block tin		1,117,752 <sup>1</sup>
Cattle	15,954 head	
Cement	39,787 tons	
Cinnamon	949,615 lb.	
Coal	450,999 tons	390,572
Coffee	800,498 lb.	
Copra	7,864 tons	
Cotton, ginned and raw	3,740 tons	
Cotton thread	3,948,921 lb.	494,720
<i>Cunao</i>	7,423 tons	
Essence of <i>badian</i> (star anise)	164,455 lb.	
Fish, dried, salted, &c.	30,715 tons	459,736
Gum and stick-lac	221,103 lb.	
Hides	2,908 tons	465,250
Maize	62,989 tons	302,348
Pepper	9,504,120 lb.	155,200
Rice	1,373,239 tons	7,518,560
Rubber	830,480 lb.	
Silk	121,787 lb.	
Sugar	5,506 tons	
Tea	2,127,948 lb.	
Zinc	33,102 tons	172,132

The following statistics show the fluctuations of the more important articles of export trade:

<i>Description.</i>	<i>Amount in 1913.</i>	<i>Average Amount for Years 1910-14.</i>
Cotton thread	3,774,529 lb.	3,501,157 lb.
Fish, dried, &c.	31,730 tons	30,240 tons
Hides	4,132 tons	3,204 tons
Maize	133,273 tons	89,319 tons
Pepper	9,212,670 lb.	8,564,313 lb.
Rice	1,286,804 tons	1,130,183 tons

The export of coal shows a steady annual increase: that of zinc was 5,370 tons higher in 1915 than in 1913, the year which showed the highest total previously.

*Countries of Destination.*—Less than one-quarter of the total exports in 1915 went to France and her colonies. The remainder was distributed in the following proportions: to Hongkong, 112 units; Singapore, 41; Dutch East Indies, 28; Philip-

<sup>1</sup> Mostly in transit from Yun-nan.

piners, 17; China, 13; England, 5; Japan, 3; Siam, 2; America, 1.

In nearly every case the goods are sea-borne, being shipped from Hai-fong, Saigon, and the minor ports (see p. 45). A certain number, however, are carried by the Hai-fong-Yun-nan-fu Railway and by junks on the Red River into Yun-nan and by road from the railhead at Nam-kwan into Kwang-si. Laos trades chiefly with Siam and China.

(b) *Imports*

*Quantities and Values.*—The value of the imports in 1915 totalled £6,483,789, of which goods to the value of £1,880,743 came from France and her colonies and the remainder from foreign countries. There was a fall of nearly £2,000,000 as compared with 1914, due almost entirely to a reduction of about 50 per cent. in the imports from France and her colonies owing to the war.

The following table shows the principal articles of import in 1915 :

<i>Description.</i>	<i>Amount.</i>	<i>Value.</i> £
Block tin		1,126,452 <sup>1</sup>
Bottles	1,494 tons	
Cotton, ginned	3,173 tons	
Cotton goods		651,348
Cotton thread	3,492½ tons	656,412
Flour	6,390 tons	
Jute sacks		346,776
Metals, manufactured		306,740
Metals, unworked		404,808
Opium from India		247,748
Petrol	38,152 tons	342,662
Porcelain, Chinese and Japanese		193,000
Silk goods		498,840
Sugar	5,990 tons	
Tea	974 tons	
Thread—flax, hemp, ramie, and jute	576 tons	
Tobacco		135,053
Wine	1,220,685 galls.	

<sup>1</sup> Mainly from Yun-nan for re-export.

*Countries of Origin.*—More than two-thirds of the imports in 1915 came from countries other than France and her colonies. The chief countries were the following, the relative proportions of their trade being indicated by the following figures :

Hongkong, 55 units; Singapore,  $23\frac{1}{2}$ ; China,  $19\frac{1}{2}$ ; England,  $4\frac{1}{2}$ ; Dutch East Indies, 3; America, 2; Japan, 2; British India, 2.

Flour came from America and Australia; sugar from Hongkong and Singapore; petrol from America and the Dutch East Indies; unworked metals from England; cotton goods from Japan, *via* Hongkong; silk goods from China.

Most of the trade was sea-borne, the chief exception being the goods sent from Yun-nan and from Kwang-si.

### (c) *Customs and Tariffs*

The tariff of the Customs Union of Indo-China is substantially the same as that of France, heavy import duties being levied on foreign goods. As each individual class of goods has its own special rate, it is difficult to give a general idea of the duties exacted; but a comparative table of the *ad valorem* rates for all classes of goods shows 34 per cent. to have been the average rate for France in 1903.

French goods pay no import duty in Indo-China, and goods exported to France are exempt from export duty, with the exception of sugar, which is regulated by special legislation, and of various other colonial products (e. g. coffee, cocoa, tea, vanilla, pepper), which pay half the duty applicable to similar foreign products according to the minimum tariff. Goods from French colonies pay no duty.

Some authorities complain, apparently with justification, that the numerous duties constitute a hindrance to the proper development of the natural resources



and commerce of the country. This has been particularly detrimental to Laos, according to Captain de Reinach, who wrote in 1911 :

‘ Malheureusement, les droits de sortie, comme les taxes locales, sont exorbitants, et le port de Saigon se ferme par la douane, à l’entrée comme à la sortie. La vallée du Mékong, ouverte en droit, est en réalité fermée par une barrière douanière. C’est là une grave faute dont on ne peut prévoir les conséquences.’<sup>1</sup>

#### (d) *Commercial Treaties*

By a treaty signed at Tientsin on June 9, 1885, the French obtained favoured treatment for specified articles of commerce between Tongking and the treaty ports in Yun-nan and Kwang-si. This took the form of a reduction of one-fifth of the 5 per cent. *ad valorem* duty on imports into China and of one-third of the similar duty on exports from China, as well as exemption from the transit tax levied at the frontiers on the carts or animals carrying the merchandise. In addition a number of articles in the nature of money, food, clothing, and personal effects destined solely for the use of the travellers were permitted to pass free of tax. At the same time the traffic in gunpowder, arms, saltpetre, sulphur, lead, spelter, salt, and immoral publications was forbidden.

A modification of this treaty, dated June 26, 1887, reduced the 5 per cent. duty on the same articles by three-tenths in the case of imports and by four-tenths in the case of exports.

### (D) FINANCE

#### (1) *Public Finance*

By a law of 1878 a General Budget was created for French Indo-China to deal with such expenditure as

<sup>1</sup> *Le Laos*, p. 353. Cf. the remarks on the *régime douanier* at pp. 92-3 of the Lyons Fair Handbook, *L’Indo-Chine* (1914).

was of common interest to the whole country. There are separate budgets for each of the States and the Provinces, and municipalities also have their own budgets. The General Budget is supported by the revenue from the Government monopolies, excise, and other indirect contributions, the customs duties, with the exception of those levied for the benefit of the Chambers of Commerce or the municipalities, and the posts, telegraphs, and railways in all the States. Besides maintaining these services the General Budget provides for the military and judicial services, public works, and other works relating to the whole of the Union. It may receive subsidies from the Home Government or be called upon to make contributions. For 1918 the revenue and expenditure of the General Budget balanced at 47,166,050 piastres.

The Local Budgets are supported by the revenue raised in each State, with the exception of the heads allotted to the General Budget, the municipalities, or the Chambers of Commerce. The greater part of the revenue is derived from direct taxation. The Local Budgets for 1918 balanced at the following figures :

	<i>Piastres.</i>
Cochin-China . . . . .	8,582,900
Annam . . . . .	5,047,173
Cambodia . . . . .	6,120,600 <sup>1</sup>
Tongking . . . . .	10,231,676
Laos . . . . .	1,747,800
Kwang-chow-wan . . . . .	469,960

The cost of the Laos administration is borne by Cochin-China (to the extent of six-thirteenths), Tongking and Annam (five-thirteenths), and Cambodia (two-thirteenths).

<sup>1</sup> Including 525,000 piastres allowed for the civil list of the King and princes.

The detailed figures for the General Budget for 1909 (the latest available) were as follows :

REVENUE.	<i>Piastres.</i>
Customs . . . . .	8,208,542·68
Indirect contributions and excise . . . . .	21,445,366·24
Registration, lands . . . . .	1,576,684·10
Posts, telegraphs, and telephones . . . . .	818,209·50
Railways . . . . .	1,431,334·60
Forests . . . . .	716,808·36
Interest on capital . . . . .	506,292·56
Contributions from Local Budgets . . . . .	1,047,282·37
Various . . . . .	137,690·16
Extraordinary receipts . . . . .	1,690,012·76
	<hr/> 37,578,223·33

EXPENDITURE.	<i>Piastres.</i>
Government and finance . . . . .	401,659·56
Agricultural inspection . . . . .	159,585·36
Military . . . . .	5,701,742·70
Naval . . . . .	103,650·20
Judicial and police . . . . .	1,022,326·86
Treasury . . . . .	662,113·57
Customs and excise . . . . .	9,648,453·95
Posts and telegraphs . . . . .	1,947,780·78
Forest and geographical services . . . . .	520,278·30
Public works . . . . .	4,221,884·48
Railway . . . . .	1,587,159·37
Education, sanitation, &c. . . . .	364,462·63
Subsidies and premiums :	
Mercantile marine . . . . .	1,172,869·12
Transport . . . . .	764,063·22
Various . . . . .	2,077,417·70
Debts repayable by annual instalments . . . . .	6,071,114·63
	<hr/> 36,526,562·43 <sup>1</sup>

<sup>1</sup> This is the total as given in the *Statistiques des Finances des Colonies françaises*, 1902-11. The actual addition of the figures, however, comes to 36,426,562·43.

The figures for the four chief Local Budgets in the same year were as follows :

## COCHIN-CHINA.

<i>Revenue.</i>	<i>Piastres.</i>
Direct contributions . . . . .	4,645,784.88
Lands, property register, &c. . . . .	40,256.77
Rents . . . . .	96,599.50
Various . . . . .	654,329.31
Former receipts . . . . .	12,408.51
	<hr/>
	5,449,378.97
<i>Expenditure.</i>	<i>Piastres.</i>
Administration, police, &c. . . . .	1,536,485.18
Education and poor relief . . . . .	746,451.30
Treasury . . . . .	175,000.00
Property register, &c. . . . .	412,193.99
Public works . . . . .	634,461.71
Commerce, agriculture, and industry . . . . .	113,686.44
Transport . . . . .	508,469.47
Various . . . . .	1,322,730.07
	<hr/>
	5,449,478.16

## CAMBODIA.

<i>Revenue.</i>	<i>Piastres.</i>
<i>Produits sur rôles et assimilés</i> . . . . .	2,064,345.33
Rents . . . . .	385,699.33
Various . . . . .	410,043.53
Former receipts . . . . .	6,128.21
	<hr/>
	2,866,216.40
<i>Expenditure.</i>	<i>Piastres.</i>
Administration, police, &c. . . . .	1,451,410.18
Education and medical service . . . . .	191,085.33
Property register . . . . .	46,928.18
Treasury . . . . .	208,634.66
Public works . . . . .	245,522.43
Port and fleet . . . . .	57,750.31
Printing . . . . .	19,622.66
Agriculture and commerce . . . . .	44,028.89
Transport . . . . .	147,130.66
Various . . . . .	239,445.13
	<hr/>
	2,651,558.43

## ANNAM.

<i>Revenue.</i>	<i>Piastres.</i>
Direct contributions, licences, &c. . . . .	2,710,414.32
Various . . . . .	208,779.78
Levy on reserve funds . . . . .	195,833.33
	<hr/> 3,115,027.43

<i>Expenditure.</i>	<i>Piastres.</i>
Court, Royal Family, and native administration . . . . .	928,999.92
Administration, police, &c. . . . .	1,005,517.04
Education and medical services . . . . .	173,935.27
Treasury . . . . .	75,000.00
Public works . . . . .	259,655.75
Agriculture . . . . .	92,872.65
Transport . . . . .	114,976.71
Various . . . . .	112,971.87
Extraordinary . . . . .	267,368.35
	<hr/> 3,031,297.56

## TONGKING.

<i>Revenue.</i>	<i>Piastres.</i>
Direct contributions . . . . .	130,336.93
Annamite taxes . . . . .	4,961,288.26
Rents, market dues, &c. . . . .	582,993.19
<i>Recettes d'ordre</i> . . . . .	2,759,988.65
Various . . . . .	444,292.30
Levy on reserve fund . . . . .	1,023,061.46
	<hr/> 9,901,960.79

<i>Expenditure.</i>	<i>Piastres.</i>
Administration, police, &c. . . . .	2,772,014.91
Education and medical services . . . . .	597,995.89
Treasury . . . . .	209,300.00
Public works and property register . . . . .	709,063.57
Commerce, industry, and agriculture . . . . .	303,332.21
Annamite administration . . . . .	165,808.18
General . . . . .	1,506,073.92
Debts due . . . . .	485,679.32
Transports . . . . .	397,744.56
	<hr/> 7,147,012.56

The financial situation in the colony is very satisfactory. At the end of 1912 the Reserve Fund of the General Budget amounted to 9,616,715 piastres, while those of the Local Budgets amounted to 4,948,700. In both cases this represented a very considerable advance on previous years.

### (2) *Currency*

The coinage of French Indo-China is as follows :

*Silver pieces.* The piastre,  $\frac{1}{2}$ -piastre,  $\frac{1}{5}$ -piastre, and  $\frac{1}{10}$ -piastre. The piastre weighs 27 grammes and the fractional coins are in proportion ; the piastre and  $\frac{1}{2}$ -piastre are 900 fine, but since 1898 the  $\frac{1}{5}$ - and  $\frac{1}{10}$ -piastre have been only 835 fine. The exchange value of the piastre fluctuates, but it is usually rather less than 2s. (frs. 2.50).

*Bronze coins.* There are two bronze coins, one of a 100th part of a piastre in value and the other of a 375th part.

*Paper currency* as issued by the Banque de l'Indo-Chine is readily accepted.

*Native currency.* Bars of silver and iron and small canoe-shaped pieces of copper are in use in certain parts of the colony.

### (3) *Banking*

The State Bank is the Banque de l'Indo-Chine, which has branches at Hanoi, Hai-fong, Tourane, Saigon, and Pnom-penh. There are, besides, at Haifong and Saigon, branches of the Hongkong and Shanghai Banking Corporation, and of the Chartered Bank of India, Australia, and China.

Advances are made to agriculturists by the Banque de l'Indo-Chine on the harvest prospects at the rate of 8 per cent. ; but difficulty has been found in arranging

a security for the loans. In Cochin-China the bank is protected against loss by the colony, which receives 2 per cent. of the interest in return.

#### (4) *Foreign Capital*

Foreign capital does not directly play a conspicuous part in the development of Indo-China. The Chinese residents, however, are largely interested in certain industries, especially in the milling of rice; in Laos they are very active as middlemen, and are said to exploit the natives unfairly. The exploitation of the mineral resources of the country is an important field for investment, but foreigners are not permitted to own mines. German companies, however, before the war were large purchasers of the minerals obtained, and indirectly influenced the mining industry to a great extent. For other fields of investment see above, p. 60.

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## MAPS

French Indo-China is shown on Indo-China, scale 1 in. = 32 miles, published in 1893 under the direction of Col. H. R. Thuillier, Surveyor-General of India; and on two maps issued by the Naval Staff Intelligence Division, viz.: (1) Indo-China, scale 1 : 4,000,000 (orographical); (2) Kwangchowwan, scale 1 : 1,000,000.





# PORTUGUESE POSSESSIONS IN INDIA

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## TABLE OF CONTENTS

	PAGE
I. GEOGRAPHY PHYSICAL AND POLITICAL	
(1) Position and Frontiers	
<i>Goa</i> . . . . .	1
<i>Damão</i> . . . . .	2
<i>Diu</i> . . . . .	2
(2) Surface, Coasts, Rivers, and Islands	
<i>Goa</i> . . . . .	2
<i>Damão</i> . . . . .	4
<i>Diu</i> . . . . .	5
<i>Anjediv</i> . . . . .	5
(3) Climate	
<i>Goa</i> . . . . .	5
<i>Damão</i> . . . . .	6
<i>Diu</i> . . . . .	6
(4) Sanitary Conditions	7
(5) Race and Language	7
(6) Population	
Distribution . . . . .	9
Movement . . . . .	9
Towns (see also Ports, below)	10
<i>Goa</i> . . . . .	10
<i>Panjim</i> . . . . .	10
<i>Marmagão</i> . . . . .	10
<i>Margão</i> . . . . .	11
<i>Mapuça</i> . . . . .	11
<i>Damão</i> . . . . .	11
<i>Diu</i> . . . . .	11
Villages	
<i>Goa</i> . . . . .	12
<i>Damão</i> . . . . .	12
<i>Diu</i> . . . . .	12

# TABLE OF CONTENTS

[No. 79]

	PAGE
II. POLITICAL HISTORY	
Chronological Summary . . . . .	13
<i>Goa</i> . . . . .	13
<i>Damão</i> . . . . .	15
<i>Diu</i> . . . . .	15
<i>Anjediv</i> . . . . .	15
III. SOCIAL AND POLITICAL CONDITIONS	
(1) Religious . . . . .	16
(2) Political . . . . .	18
(3) Military Organization . . . . .	19
(4) Public Education . . . . .	20
Note on the Village Communities . . . . .	20
IV. ECONOMIC CONDITIONS	
(A) MEANS OF COMMUNICATION	
(1) Internal	
(a) Roads	
<i>Goa</i> . . . . .	24
<i>Damão</i> . . . . .	25
<i>Diu</i> . . . . .	25
(b) Rivers and Canals . . . . .	26
(c) Railways . . . . .	27
(d) Posts and Telegraphs . . . . .	28
(2) External	
(a) Ports (see also Towns, above)	
<i>Marmagão</i> . . . . .	28
<i>Panjim</i> . . . . .	29
<i>Damão</i> . . . . .	30
<i>Diu</i> . . . . .	30
(b) Shipping Lines . . . . .	31
(c) Telegraphs . . . . .	31
(B) INDUSTRY	
(1) Labour	
(a) Supply . . . . .	31
(b) Emigration and Immigration . . . . .	32
2) Agriculture . . . . .	33
(a) Products of Commercial Value	
Vegetable . . . . .	33
Animal . . . . .	38

	PAGE
(b) Methods of Cultivation . . . . .	38
Irrigation . . . . .	39
(c) Forestry . . . . .	40
(d) Land Tenure . . . . .	40
(3) Minerals	
Goa . . . . .	41
Damão . . . . .	41
Diu . . . . .	41
(4) Manufactures . . . . .	42
(5) Power . . . . .	43
 (C) COMMERCE	
(1) Domestic . . . . .	43
(2) Foreign . . . . .	44
(a) Exports	
Quantities . . . . .	44
Values . . . . .	44
Countries of Destination . . . . .	45
(b) Imports	
Quantities . . . . .	46
Values . . . . .	46
Countries of Origin . . . . .	46
 (D) FINANCE	
(1) Public Finance . . . . .	47
(2) Currency and Exchange . . . . .	48
(3) Banks . . . . .	49
 AUTHORITIES . . . . .	50
MAPS . . . . .	52





## I. GEOGRAPHY PHYSICAL AND POLITICAL

### (1) POSITION AND FRONTIERS

THE possessions of the Portuguese in India, known to them as the 'State of India', fall into three main divisions, all on the west coast: Goa, Damão (or Daman), and Diu.

Goa is a territory with an area of 1,301 square miles, lying between the Western Ghats and the sea, with an extreme length of 62 miles from north to south and an extreme breadth of 40 miles. It is situated about 250 miles south by east of Bombay, roughly midway between the southern extremity of India and the Gulf of Cambay. On the north it marches with the state of Savant Vadi, on the east with the British districts of Belgaum and North Kanara, on the south with North Kanara. The northern frontier is the River Terekhol, the south the hilly country of Polem.

The territory is divided into the Old and the New Conquests (*Velhas* and *Novas Conquistas*). The Old Conquests include (1) Ilhas, i.e. the islands between the estuaries of the Mandavi and Juari, especially the island of Goa; (2) the coastal provinces of Bardez and Salsette, respectively north and south of the islands; (3) the island of Anjediv, 5 miles south-west of Karwar and about 2 miles from the mainland. The New Conquests include the province of Pernem in the extreme north of the territory; the rest lie east and south of the Old Conquests, being divided into the provinces of Sanquelim, Ponda, Sanguem, Quepem,

Canacona, and the military district of Satari. These divisions are known as *concelhos*.

*Damão* (or *Daman*), with an area of a little over 148 square miles, is situated within the British district of Thana in Bombay Presidency (Gujarat), about 100 miles north of Bombay city, at the east side of the entrance of the Gulf of Cambay.

The territory consists of three detached portions: (1) *Damão* proper, divided by the Damanganga River into the *parganas* of Naer or *Damão Grande* (Great *Damão*) and Calana Pavori or *Damão Pequeno* (Little *Damão*); (2) Dadra, a very small enclave; (3) the *pargana* of Nagar Haveli, which constitutes the bulk of *Damão* territory (112 square miles). These last two portions are separated from *Damão* by a strip of British territory 5–7 miles wide, through which passes the Bombay, Baroda, and Central India Railway, with a station, Daman Road. The territory is bounded on the north by the Bhagwan River and on the south by the Kalem. *Damão* and Nagar Haveli form two *concelhos*.

*Diu* is an island separated from the southern extremity of the peninsula of Kathiawar (Bombay Presidency) by a narrow swampy boat-channel. It lies 5 miles west of Nawabandar, and measures 7 miles from east to west, its extreme breadth being 2 miles from north to south. The total area of the territory is about  $20\frac{1}{4}$  square miles. This includes, in addition to *Diu* island, (1) the village of Gogola (Gogla) on the mainland opposite *Diu* town, with a tract outside it about  $1\frac{1}{4}$  mile in length; (2) the fort of Simbor, on an islet 14 miles from *Diu* town.

## (2) SURFACE, COASTS, RIVERS, AND ISLANDS

*Goa*.—The surface of *Goa* slopes steeply in the east, more gradually near the coast, from the heights of the Western Ghats (Sahyadri Mountains), which throw

off numerous spurs and subsidiary ridges across the territory. The chief heights (3,400–3,800 ft.) are in the mountainous plateau of Satari. The mass of Sidnato in Ponda divides the two marked depressions of the Juari and Mandavi basins. The southern heights do not exceed 2,020 ft. The Ghats resemble an elevated sea-coast with promontories and spurs, like the fjord-coast of Norway.

Below the mountains the country is wooded and broken up, a region of steppe with short grass; then for about 20 miles from the coast there is a well-cultivated belt in the centre of the country, marked by very few hills and those of but low elevation. In the north Pernem is hilly, in the south in Canacona the Ghats approach nearer the sea. The plains of the Old Conquests are of recent formation. In the south of the New Conquests are small irregular valleys and narrow plains, descending unsymmetrically to the sea. The country is drained entirely into the Arabian Sea, many streams taking their rise either within or at no great distance outside the territory. Along the banks of the rivers are many marshes.

The chief towns and the densest rural population are found in the lower parts of the basins of these streams, where there is the greatest extent of cultivable land, and where the rivers, being navigable, serve as important means of communication. The fact that the Ghats in this part are not of great height and can be crossed at many points made Goa in earlier times a natural outlet for the Deccan, and it has been thought (by Silva Telles, for instance) that the ancient importance of Goa depended to a great extent upon this; but the export trade of the interior is not greatly attracted to a coast that suffers so much from the monsoon as does the Malabar coast.

The soil is chiefly argillaceous, but also contains light sand and more or less decayed vegetable matter ; in many parts it is gravelly or stony, and its fertility varies in different localities.

The coast of Goa, generally speaking, consists of sandy bays fringed with coco-nut trees, separated by several rocky capes. The flattest part is between Colla Bay and the Sal River, where there is low, cultivated land with small hills.

The mouths of the Mandavi and Juari, separated by Cabo Point at the extreme west end of Goa Island (Tissuadi), form the two harbours of Aguada (Panjim) to the north and Marmagão to the south. Outside the river estuaries there are two bays which afford protection against the north-east wind—Colla Bay, 14 miles north of the Sal River, and Canacona Bay,  $1\frac{1}{2}$  miles north of the Talpona.

The rivers of Goa are all navigable for small craft ; and the channels between the Juari and Mandavi give a good system of intercommunication. There are but few bridges ; more will be required if the number of secondary roads is to be increased.

*Damão.*—In Damão the only hills are in the *pargana* of Nagar Haveli, and do not exceed 800 ft. in height. The principal range forms the southern boundary of the Portuguese possessions. Most of the soil is alluvial ; it is fertile, and its forests are famous.

The coast-line is very limited in comparison with the size of the territory, extending about 6 miles from the mouth of the Kalem to that of the Bhagwan. Only small boats can enter the mouths of these two rivers ; but the Damanganga (or Sandalcão), at the mouth of which is the town of Damão, provides indifferent anchorage, and is navigable for small boats up to Calacaxigão, about 3 miles from its mouth. The coast is low.

In Damão the only important river is the Daman-ganga. There are no bridges over the rivers in Nagar Haveli, but the want would be felt only in the rainy season, and the expense of erecting them would not be warranted by the circumstances of the province.

*Diu.*—The island of Diu has hills about 100 feet high. Coco-nut groves are scattered about the island. Its marshes render it unhealthy; the land is rather barren, and water is scarce. Rain-water is collected in cisterns.

The southern face of the island is a sandstone cliff, with deep water below it; the channel separating the island from the mainland becomes at its eastern end the harbour of Diu.

*Anjediv.*—The island of Anjediv is about three-quarters of a mile long, with an area of rather more than half a square mile. Its seaward side is abrupt, barren, and rocky, and the island rises at some points to 200–300 ft. The landward side slopes more gently and is sheltered and fertile; and on this side there is a good but little-used anchorage. The island is unhealthy; the buildings have fallen into decay; the population declined from 527 in 1872 to 50 in 1900.

The two islands of *St. George* (west and east), lying off Cape Ramas, are nearly connected at low water by a narrow neck of shingle and rock. Together they are  $1\frac{1}{2}$  miles in length.

### (3) CLIMATE

*Goa.*—The climate of Goa, hot though it is, is regarded as less unsuitable for Europeans than that of any Portuguese colony except Macao, and is certainly healthier than that of Diu. The transition from the cool to the hot season takes place in March; and the highest mean maximum temperature for any month is

90° F. (32° C.) in April and May. In May the south-west monsoon begins to set in; and in June and July the monsoon rains are heaviest. They slacken in August; but in the period June–August 80·74 inches out of a total average rainfall of 100·06 inches are recorded at Marmagão. The heavy rains may cause partial inundations in some districts, e. g. the valley of the Sal, but great floods are rare. On the other hand, the rains seldom fail so completely as to cause distress. The south-west monsoon, which at its height prevents coastwise navigation, usually weakens sufficiently to permit the general resumption thereof about the middle of August, though not in Aguada Bay (cf. p. 30). The temperature and rains decrease in September and October, in which month, at the turn of the seasons, mists on the mountains are prevalent. Normally the north-east monsoon, known from its direction as *terral*, begins in November; it usually blows from sunset till morning. The lowest mean minimum temperature, 70°–71° F. (21° C.), is recorded in December–February, a period which is practically or wholly rainless. The August rains are thought to have especially valuable qualities for the palm-trees; during the rains of the second half of May the *serodio* crop of rice (see p. 36) is sown.

*Damão.*—The seasonal variations in Damão are much the same as those in Goa, the rainy and dry periods being practically identical. The prevailing winds in the dry season are in the morning ESE. to NNE., in the afternoon NW. to WNW.; during the rainy season they are SSW. to W. Nagar Haveli seems to be more healthy than Damão proper.

*Diu.*—The climate of Diu is hot, dry, and trying; and the place is made unhealthy by marshes and bad sanitation.

#### (4) SANITARY CONDITIONS

The accounts of the healthiness of Portuguese territory in India differ considerably. The most general causes of disease are bad housing, insufficient water-supply, poor drainage, and the existence of marsh-land. On the whole it may be said that, in Goa, Salsette and the New Conquests are healthy, but that along the margins of some of the rivers the conditions are unfavourable. Old Goa suffered so much from intermittent fever and plague that it became necessary to transfer the seat of government to Panjim (see p. 10). The climate in Damão is said to be generally healthy, but one reformer advocates the demolition of the walls both of this city and of Diu in order that breezes may more easily circulate in the streets of the town. Diu is the least healthy part of all; the marsh through which the channel flows that separates the island from the mainland propagates fever; and tuberculosis has devastated the village of the Deres (see p. 8).

The diseases that prevail in these countries are remittent and intermittent fever, diarrhoea, dysentery, measles, small-pox, and occasionally plague and cholera. There was a serious visitation of plague in Damão in 1896-7.

There were in 1904 three hospitals with 2,631 in-patients, as well as three military hospitals, in Goa, Damão, and Diu.

#### (5) RACE AND LANGUAGE

The information supplied by Portuguese authorities on the native inhabitants is singularly scanty and inadequate. The native race of Goa is a branch of the Mahrattas. Damão, just at the north of the



Mahratta country, has a certain infusion of Gujaratis, who are largely nomadic. Diu has a large proportion of Gujaratis among its scanty population, including the traders of that race who are called Banyans; the word is a functional designation, and is applicable to a number of castes of diverse origin, customs, and social status. It is used generally of any Hindus engaged in trading. The lowest element in the Diu population is called *Deres*. The other elements in the population include Parsees and Mohammedans and a great number of 'descendants', that is, persons whose ancestry includes a European of either sex.

The two main languages spoken are Marathi and Gujarati. The latter is spoken not only by the Hindu, but also by the Parsee inhabitants. The Marathi spoken in Goa is the Konkani dialect; as spoken in Goa, it has some admixture of Portuguese words. Gujarati is written in a script resembling the Nagari alphabet. Portuguese is the official language, and is spoken in the towns and by educated people. Twelve or more periodicals are issued by natives in the Portuguese language. There are a few public libraries, including one of some merit at Panjim.

In general the natives of Goa are hospitable, courteous, and intelligent, though not progressive. Woman, however, has little chance of development. She is dependent in turn upon her father, husband, and sons; and, although suttee has been formally abolished, it has really only been commuted to perpetual isolation. The Portuguese give every protection to a widow who does remarry. In 1900 widows and widowers formed 12.6 per cent. of the population. Among the natives not many remain unmarried.

## (6) POPULATION

*Distribution*

According to official returns (which are not always mutually reconcilable) the population of Portuguese India in 1910 was 548,472, of which Goa had 486,752, Damão, 47,550, and Diu, 14,170. The population of the Old Conquests was greatly in excess of that of the New Conquests, the largest figures being those of Salsette, 119,038, and Bardez, 111,192. The density of population ranges from less than 64 per square mile in Sanguem, and 105 in Satari, to 1,003 in Ilhas, and nearly 1,280 in Bardez. Sanguem owes its low population to its marsh-land and small supplies, though it has a good soil and might be made productive. Ponda is more thickly populated than the other provinces of the New Conquests, and with its fertile soil and good supply of springs and the more industrious nature of its inhabitants, partakes of the characteristics of the Old Conquests.

The following figures, which show the relations of natives to other population, are taken from the census of 1900. These give the Asiatics as 531,330, the Europeans as 246, the Africans and their descendants as 212, and leave 10 unaccounted for. Of this population 521,397 were Portuguese subjects, 10,394 British, 3 French, 3 Italian, and 1 German.

*Movement*

Taking the territory as a whole, the population is increasing. In 1900 the figures given were for Goa, 475,513; for Damão, 41,671; for Diu, 14,614; so that in the following ten years there was an increase in Goa of 11,239, in Damão an increase of 5,879, and in Diu a decrease of 444. Statistics published for 1913

showed that in that year the births exceeded the deaths by 1,846. The only *concelhos* in which there was a decrease were Satari and Damão.

### *Towns*

*Goa*.—The only towns of any size are in the Old Conquests. *Old Goa* is for the most part ruined and overgrown with trees, but contains the shrine of St. Francis Xavier, which gives the town such importance as it still possesses. At the periodical exposition of his relics the place is thronged; in 1859 there were said to be 200,000 pilgrims in the place, and in 1878 between 30,000 and 40,000. There are also three convents. The small population is very poor.

*Panjim*<sup>1</sup> (or New Goa; population 9,325 in 1900) is the seat of Government. It includes the old city within its municipal bounds, as well as the suburb of Ribandar, which lies between them and is the place of residence of the officials and richer men. It lies about three miles above the mouth of the river in a picturesque situation, and has wide streets with good houses and several handsome public buildings. The site has in great part been reclaimed from marsh, and is not altogether healthy. In the poorer houses cattle and human inhabitants live together; and there is no separation of quarters for Europeans and natives. Panjim suffers from great scarcity of water; the drainage system is inadequate; and piles of refuse rot along the sea-shore.

*Marmagão*<sup>2</sup> (Mormugão) is the name of the port at the eastern extremity of the peninsula of that name in Salsette province, five miles south of Panjim and on the left bank of the Juari River. About 1684–1712 various preparations were made to transfer the capital

<sup>1</sup> See also below, p. 29.

<sup>2</sup> See also below, p. 28.

from Goa to Marmagão; this step was alternately ordained and countermanded, and now the Government buildings are in ruins. The site is healthy.

*Margão* (population 12,216 in 1900), in Salsette province, lies in a fine plain on the Sal River, about 16 miles south-east of Panjim; it is a modern town with rectangular streets, and has a number of good buildings. It is a station on the West of India Portuguese Railway. Unfortunately its drainage is not good, and its water-supply is unsatisfactory, coming from surface wells.

*Mapuça* (population 10,733 in 1900) is the chief town of Bardez district, about eight miles north of Panjim. It is a commercial centre of some importance, and possesses a public library and other institutions. It contains a church founded in 1594, dedicated to Our Lady of Miracles, whose festival is celebrated not only by Christians but by Hindus; a great fair is held on this occasion. The same censures may be passed on its drainage and water-supply as on those of the other towns mentioned, with additional strictures on the big manure-heaps that abound in it.

*Damão*<sup>1</sup>.—In Damão the chief town, which gives its name to the province, is at the mouth of the Damanganga and is situated on both banks. It has two forts (in one of which are the Governor's palace and Government buildings), private residences, and ecclesiastical buildings. The whole population is Christian. The chief town of Nagar Haveli used to be Dadra; it is now Paço d'Arcos (formerly Silvassa). About four miles from this is Naroли, a small centre of commerce, to which native products are brought.

*Diu*<sup>2</sup>.—The town of Diu, with its fortress and citadel at the east of the island, presents an imposing appear-

<sup>1</sup> See also below, p. 30.

<sup>2</sup> See also below, p. 30.

ance with its massive walls. It used to be very flourishing, having a population of 50,000, but has greatly declined in prosperity.

### *Villages*

*Goa.*—In Goa there are 407 villages, of which 134 are in the Old Conquests. In the less cultivated parts the population is concentrated in small villages ; thus among the provinces of the New Conquests Satari, which has the smallest population (17,982), has most villages (85).

*Damão.*—Some of the population of Damão consists of nomadic Gujaratis. Such Parsees as live in Nagar Haveli do not as a rule reside there permanently, but have their homes in Damão ; they act in Nagar Haveli as lessors of land, usurers (*saucares*), and traders in agricultural produce.

*Diu.*—There are on the island three large villages. The fort of Simbor, to the east of Diu, along the coast of Kathiawar, has a population of about 1,900 ; but this is a fluctuating population composed of fishermen and strangers who are only there for a few months in the year.

## II. POLITICAL HISTORY

### CHRONOLOGICAL SUMMARY

- 1510. Old Goa taken by d'Albuquerque.
- 1535. Fort built at Diu.
- 1538. First siege of Diu.
- 1543. Salsette and Bardez acquired by Portugal.
- 1546. Second siege of Diu.
- 1559. Damão and Dadra captured by the Portuguese.
- 1759. Seat of government moved from old Goa to Panjim (New Goa).
- 1780. Nagar Haveli ceded to Portugal by the Mahrattas.
- 1843. Government formally established at Panjim.

THE Portuguese possessions in India consist now of three detached territories lying embedded in the Bombay Presidency of British India. It is somewhat misleading to describe them, as is sometimes done, as the surviving fragments of a colonial empire. Even in their palmiest days the Portuguese only administered a very small area, and their influence extended but little beyond the ground their arms commanded. They have ruled the island of Goa for over 400 years, but generally they preferred to occupy commercial centres commanded by their fleets and to look for their income to the receipts from the customs. On the whole the relations of Portuguese India with British India have remained friendly.

*Goa.*—Of the Old Conquests (see p. 1), Goa proper was conquered by Albuquerque in 1510, and Salsette and Bardez were obtained in 1543. The New Conquests were acquired in the general scramble at the end of the eighteenth century.

Within historical times the town of Goa has occupied three sites. There are no remains of the first Goa, which was captured from the Hindus by the Mohammedans in 1479. The Mohammedans founded the second Goa, which was taken from them by Albuquerque in 1510 ; it lies five miles north of the first. It began to decline early in the seventeenth century with the long-drawn-out Dutch war, when its outlying colonies were taken and its commerce seriously crippled. While enemies attacked it from without, epidemics of unexampled violence, due largely to the neglect of simple sanitary precautions, ravaged it within. For many years the appearance of wealth was maintained, but towards the end of the century, when the incursions of the Mah-rattas (though they never attacked Goa itself) added to the general misery, the marks of decay were unmistakable. In 1684 the Viceroy, supported by the votes of the leading inhabitants, proposed to abandon the city and found a new one on the Marmagão peninsula. The Home Government agreed, but there arose a sharp division of opinion in Goa, headed by the priests in opposition to the hierarchy.<sup>1</sup> After several changes of opinion and an expenditure of £25,000, the idea was dropped. Driven away, however, by its unhealthiness, the inhabitants continued to forsake the place ; and the Count of Sandomil (Viceroy 1732-41) reopened the question and suggested another site on the Mandavi, near the second Goa. In 1759 the Viceroy moved thither. The expulsion of the Jesuits (who were traders as well as religious) was the final blow to the second Goa ; and in 1775 the population of the city, which had been estimated at about 200,000 early in

<sup>1</sup> See *O Oriente Portuguez*, vol. vii, p. 34. The Count of Alvor (Viceroy 1681-6) is said to have found his position so difficult that he placed the emblems of his office on the body of St. Francis Xavier, trusting that the saint would find a way out.

the seventeenth, and at 30,000 early in the eighteenth century, had sunk to 1,600 souls. The Home Government pressed the rebuilding of the old city, but the facts were too strong, and the officials and *fidalgos*, when ordered to repeople Goa, obeyed by living there during the day, and joining their families in healthier surroundings at night. During the French wars the Home Government paid little attention to India; and the change of site to New Goa became firmly established. It was formally accepted by Portugal in 1843.

*Damão* proper, with *Dadra*, was captured by the Portuguese in 1559. *Nagar Haveli* was ceded to them by the Mahrattas in 1780.

In the island of *Diu* the Portuguese first got a footing in 1535. The interest of *Diu* to the Portuguese centres in the two great sieges it endured in 1538 and 1546 and the important battle won by D. João de Castro that terminated the second.

On the island of *Anjediv* stood the first fort the Portuguese built in India, and it has its corner in English history. The troops sent to receive the cession of Bombay were encamped here and lost very heavily while waiting on the dilatory proceedings of the Portuguese authorities.



### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

DIFFERENCE of race goes with the differences of the four main classes (*varna*), Brahmans, Kshatriyas (Charados), Vaisyas, and Sudras, under which the Indian castes are grouped. It is a tenable theory that the conquering, fair-skinned people, when they first came in contact with the conquered black aborigines, though they despised them, took wives from among them. At a later period they closed their ranks to further intermarriage; and the amount of intermarriage had been greatest in the lowest degrees of the social scale. Thus we find, as we should expect to do, among the Mahrattas of the Brahman class a type differing widely from the Sudras. The bulk of the Goanese are Sudras, members of the lowest of the four classes, showing a far larger amount of Dravidian blood.

There is now no intermarriage between the various castes; the offspring of such a union is a *pariah*, and has no caste. There are forty castes and sub-castes in Portuguese India. Caste distinctions are retained for social purposes; and even native Christians adhere to them, claiming to be Brahmans, Charados, Vaisyas, or Sudras. The Portuguese laws take no account of caste or religion in regard to admission to any public office; but, except as a doctrine of political rights, this idea of equality does not prevail. There is one caste of Sudras, found in Satari and Nagar Haveli, of a very uncivilized character.

About one-half of the people are Christian—the result not of recent Christian missions, but of their evangelization in the sixteenth century. This has meant a very considerable modification of manners and customs on the part of the Christian portion of the population. European dress is largely adopted. It is said that Christianity has not improved the industry of the inhabitants; they have caught the Mediterranean love of festivals and religious services. Nevertheless many of the Christian natives have distinguished themselves in high posts.

Observance of the rules of that congeries of religious systems which we vaguely call Hinduism varies very much. Thus there are Rajputs in Damão, who claim to be the representatives of the second class, the Charados, the military caste; they eat flesh and drink spirituous liquors, and neglect many of the precepts of their caste. The rules that they are most scrupulous in observing are (1) that they should not kill cows, and (2) that widows should not re-marry. This last rule is a considerable check on the growth of Hindu populations, especially as it is coupled with child-marriage. The nominal bride is often a widow before she is really married, and is secluded for the rest of her life even from her relatives.

The population is almost equally divided between Roman Catholics, who are 49·3 per cent., and Hindus, who are 49 per cent., the former largely predominating in the Old Conquests, the latter in the New. Of the other religions (in 1900) there were 8,431 Mohammedans, 417 Parsees, 143 Jains, 2 Buddhists, and 13 Protestants.

The only Hindu temples remaining in all Goa are those in the New Conquests. In the Old Conquests every means, from wholesale bribery on the one hand to terror on the other, had been used in the sixteenth

century to spread the orthodox faith, with the result that over 90 per cent. of the whole population professes the Christian religion; but the memory of the old social order remains so far potent that the old caste distinctions are still remembered and govern marriage arrangements.

Religious orders are now abolished; and Church and State were separated in 1911. Persecution for religious reasons is a thing of the distant past; and it would make the old inquisitors turn in their graves to learn that succession to the headship of Hindu shrines is a subject of investigation and decision by the Portuguese civil courts.<sup>1</sup>

## (2) POLITICAL

The three detached territories, Goa, Damão, and Diu, are all under the Governor-General in Goa, who is appointed from Europe for a period of five years. Partial local self-government was introduced in 1914.

The powers of the Governor-General are circumscribed both by his warrant of appointment and also by the councils, whose assistance he must invoke, especially in financial matters. The most important council includes the chief ecclesiastical, civil, and legal officials; and there are five other standing councils dealing with different departments. With regard to local government, there are in the Old Conquests three municipalities; the rest of the area, together with that of the New Conquests, is divided into parishes. The parish is the unit of administration, and in each there is a local council presided over by a magistrate called a *regedor*, who directs the local police, supervises liquor shops, &c. The parish councils work in subordination to the district councils, of which there are three in the Old

<sup>1</sup> See decree dated February 9, 1901, in *O Oriente Portuguez*, vol. iii, p. 441.

Conquests and seven in the New. To each district the Governor-General nominates an official who has certain duties connected with public safety and health, and is also the tax collector.

The Governors of Damão and Diu are subordinate to the Governor-General. The apparatus of local government is the same as that in Goa.

Goa, Damão, and Diu, with Mozambique, Macao, and Timor, form a judicial district. This district is divided into *comarcas*, which are further divided into *julgados*, each of which contains a certain number of parishes. The *regedor* already mentioned has certain civil and magisterial duties in petty cases; and from his decisions an appeal lies to the officer in charge of the *julgado*, who again is subordinate to the judge of the *comarca*, whose duty it is to go on tour in the area subordinate to him. From his decision, in important cases, an appeal lies to the Goa High Court (*Tribunal da Relação*). This court consists of a chief and four judges; and from their decision, in certain cases, a further appeal lies to the Supreme Court in Portugal. Judges of the High Court and *comarcas* are Europeans; those of the subordinate courts are natives of the country.

### (3) MILITARY ORGANIZATION

After a mutiny in 1871 the native troops were disbanded and have not been revived as a distinct organization. In 1895 there was trouble with the European troops, who refused to obey orders and embark for Mozambique; this trouble was settled with difficulty. There were further disturbances in 1901 and 1911, in which some of the civil population joined. The present force consists of a company of infantry and a few artillery (Europeans), and five companies of native troops. There are also some civil police.

#### (4) PUBLIC EDUCATION

About the beginning of the present century the state of education was reported to be very unsatisfactory. School buildings were generally few, small, dirty, and unsuitable, and little attempt was made to acquaint the natives with the language, history, &c. of the ruling power. In 1900 only 10 per cent. of the total population was literate. Recently, it is said, some progress has been made.

At Panjim there is a national college or lyceum, which professes to give instruction in Portuguese language and literature; French, English, Latin, and Marathi; elementary mathematics, science, and philosophy; drawing; the principles of political economy and civil government. There is also a school of commerce at Panjim, and there are several other secondary schools. There are municipal lyceums at Margão and Mapuça. A medico-surgical college at Panjim is under State supervision. Official public instruction consists of primary education of two grades, elementary and complementary, separate or united, according to the numbers and needs of the school-going population in the different localities. There are also schools under the authority of the Roman Catholic Church. In all, the returns for 1914-15 show a total of 142 schools in Portuguese India with 9,546 pupils (6,066 boys and 3,480 girls). In 1908 there were only 101 schools, of which 84 were Portuguese, 7 Marathi, and 10 Gujarati.

#### *NOTE ON THE VILLAGE COMMUNITIES*

It is fortunate for the historical student that the record of the customs of the Goa villages was made in 1526, but the effect on the villages themselves has been

disastrous. The record became part of the law of the land, and as such was liable to interpretation like any other law. Had there been no record, the villages might perhaps have been allowed to work out their own future; and, by escaping the eye of the jurist trained in the canon law, the peculiarities which he would consider anomalies would not have invited interference. The confiscation of the rent-free grants to village servants in 1541 was but one of many exactions; and it is significant that in 1735 the Governor had to determine that ecclesiastics could not collect 'alms' (*esmolos*) for the Church by either imprisoning the villagers or distraining their goods.

By the record of 1526 the Gawnkars were the sole administrators of the village; and, as they had to submit to continual demands either from the State or the Church, and had no power to sell land, they were compelled to sell fractional shares of the profits, in order to pay their way at all. An ineffectual attempt to prevent these sales was made by the Viceroy in 1604. It is impossible to see on what basis these fractional shares were calculated. In northern India either the *bigha* or the rupee is the unit; in the former case the shares are either *biswas* ( $\frac{1}{20}$ th) or *biswansis* ( $\frac{1}{400}$ th); in the latter, *annas* ( $\frac{1}{16}$ th) or *pice* ( $\frac{1}{192}$ nd). In Goa there was no uniformity; the number of *tanga* shares varied in each village. The account of these *tanga* shares given in *Oriente Conquistado* (vol. i, p. 171) is too childish to quote. Other authorities either do not refer to the question or say frankly they are ignorant of how the number of shares was originally determined. It would almost seem as if shares in certain definite things and not in the whole village were sold, as some papers mention *tangas de gutega* and *tangas de raxi* (the latter to include *recamo*, *vantem*,

*serodio*, &c.), but the meaning of these words is obscure.

The Khuntakars, as the purchasers of fractional shares were called, had no voice in the management of the villages ; and a long and bitter struggle began between them and the Gawnkars, a struggle to which the Kulacharis (holders of land on perpetual rent or on lease) were not parties, though they eventually profited by the result. The rights of collection were sold annually by auction to the highest bidder among the Gawnkars ; the position of bailiff (*sacador*) was similarly sold to the lowest bidder without such distinction. Down to 1735 the Khuntakars, as such, had no rights at all ; but thirty years later they and the Gawnkars were admitted to the auctions on equal terms. Still it was not till the middle of the nineteenth century that the Khuntakars were allowed a share in the management of the village. Matters had been reduced by that time to an absurdity. Thus there was a village owned entirely by one Khuntakar, who had no voice in the management, this being in the hands of a hereditary Gawnkar who had no share in the proceeds ; while in others there was a body of several hundred Gawnkars and as many Khuntakars, and any one of the former could veto any suggested arrangement. The last appearance of the Gawnkars as a body was in 1858, when they petitioned for a restoration of their former position. Their case was hopeless, and they gradually dropped out of the records ; and the more recent papers contain no reference to them. From 1840 to 1897 various attempts were made to create communities out of the owners of the different rights—a very miscellaneous body, for some received an annual fixed pension, others shared in the profit and loss, while others again were

perpetual lessees. The most curious experiment was that of 1882, when a law was made to create in each village for agricultural purposes a sort of joint stock company. Some of the beneficiaries received pensions, and the rights of others were transmuted into 10-rupee shares. This law did not work, and in 1897 another was passed, allowing any village to go into liquidation, when the field boundaries were to be demarcated, a cadastral survey made, and the village lands sold off by auction.

In 1870 the communities numbered 426, of which 145 were in the Old Conquests, 281 in the New; in the New Conquests the *panchayat* or meeting composed of one or more members of each clan (*vangor*) had a more prominent position. The community undertakes various duties in regard to the maintenance of religious services, schools, roads, &c. It is responsible to the Government for territorial taxes, and makes its own levy on individual members. It is under Government supervision, and can spend no money without Government sanction.



## IV. ECONOMIC CONDITIONS

### (A) MEANS OF COMMUNICATION

#### (1) INTERNAL

##### (a) *Roads*

*Goa.*—There are many roads in Goa, but few of importance, and they are not well kept up. The most important were made in the latter half of the nineteenth century. The best is one that starts from the village of Donna Paula and goes by Panjim and Ribandar to Old Goa. The last two miles of this are a causeway built over swamp. From Panjim an important road (21 miles) goes north; starting at Velim, a village in Bardez facing the city, it goes by Mapuça, a centre of many small roads, and Assonora to Cansarvale, where it is linked up with the good metalled road that runs through the British district of Manari. From Assonora a road runs south-east to Bicholim, whence one road goes up to the frontier, and another, passing through Sanquelim, crosses the province of Satari to Massordem. At Sanquelim a road branches south-east to the valley of the Mandavi and continues up it to Usgão, whence it goes to the Tinem Ghat and joins the high road to Dharwar; this road is incomplete, but, if properly constructed, might be of great importance by opening connexions between the port of Goa and the British provinces in the interior. In a map compiled in 1915 from surveys taken between 1884 and 1895, a good metalled road is marked from Goa to Ponda (10 miles) and for nearly another 10 miles

east of Ponda, after which it ceases to be metalled. In the south an important road runs from Panjim to São Lourenço, and then on the other side of the Juari by Margão and Canacona to the southern frontier. Another centre of roads is Sanvordem, on the railway, whence roads run south-west and south-east to Quepem and Sanguem respectively. When the road system is developed, a great number of bridges will be wanted for roads of the second and third order.

*Damão.*—In Damão the roads have been badly neglected. The chief road in Damão proper is the road from Damão Pequeno to Vapi ( $6\frac{1}{2}$  miles long), the Portuguese and British parts being almost equally divided. There is also the municipal road of Satvara running from Damão to the village of Varacunda, but this has hardly been kept up at all. In Nagar Haveli roads are almost non-existent. There was a road, four miles in length, from Paço d'Arcos to Naroli, but it has been neglected and is almost impassable. A writer in the *Boletim da Sociedade de Geographia de Lisboa* (1911) presses for more roads in this district, especially from Paço d'Arcos to Cadoli and to Mandonim, with a branch from Dapara to Patti; from Naroli by Luari and Chikli to Dapara; and from Mandonim by Vansda, Corchonde, Dindonim, Ambabari, Meru, and Vagchora to Cota—a network of approximately 36 miles.

*Diu.*—Diu has one road from end to end of the island—from the town of Diu to Brancavara ( $7\frac{1}{2}$  miles); from it radiate three branch roads, the longest of which measures only about half a mile. A road is projected from Gogola harbour to the frontier,  $1\frac{1}{2}$  miles long; this is important, as Gogola is said to be the least decadent part of the colony of Diu.

(b) *Rivers and Canals*

A special feature of Goa is the network of navigable channels in the lower part of the course of the Mandavi and the Juari. The Mandavi is navigable up to Usgão (about 18 miles) for vessels which do not demand more than 6 ft. of water. Its tributary, the Volvota, is navigable for 2 or 3 miles above its confluence. Its other confluent, roughly speaking, are tidal and navigable up to the places whose names they bear, viz. Gangem, Bicholim, Assonora, Tivim, and Mapuça. The Juari (Zuari) is navigable to Rachol, 11 miles above the fort of São Lourenço. Reference is made to a 'steamer-service' in connexion with the station of Sanvordem, which is even higher up, but these must be very small vessels. Ordinarily the vessels that navigate these rivers are the *patamarin* and *tona*. Only the mouths of the two rivers are navigable for big vessels. This network of navigable rivers, including their branches and tributaries, is estimated at 134 miles in length.

Of the other rivers the Terekhol is navigable for about 12 miles; big *tonas* proceed up to the *cassabé* (settlement or chief town) of Pernem; above that small *tonas* go up to Uguem; *patamarins* enter the harbour. The Chapora is navigable for big *tonas* up to Macazana, 9 miles above the mouth; small canoes proceed up to the old fort of Alorna. The Sal, into which the Betul flows at its mouth, is navigable to near Margão (about 8 miles). The Talpona is navigable for a short distance. All these rivers, except the Juari, are exposed at their mouths to the south-west monsoon, so that during the months when that wind is blowing they are not easily accessible from the sea.

A scheme is on foot for deepening the Mapuça from the village of Aldona up to Mapuça, so that steamers

may go to that town from Panjim. The cost of this is estimated at 15,200 *escudos*, or about £3,300.

*Canals.*—There are no navigable canals in Goa; the only existing canals are for the purpose of irrigation. One canal would be very valuable, viz. from the mouth of the Tivim connecting the Mapuça river with the Chapora. This would add to the system of internal navigation the Chapora itself, and in a certain measure the Terekhol, which flows out only 8 miles north of it. The land that lies between is not high, and the capital expenditure necessary ought to be repaid by the economic results. The cost is estimated at 55,700 *escudos*, or about £12,000.

### (c) *Railways*

The only railway is in Goa. It runs from Marmagão harbour to the British frontier, 4 miles west of Castle Rock, where it connects with the Southern Mahratta system. There are 12 stations, of which the chief are Marmagão, Vasco da Gama, Margão, Sanvordem, and Collem. The line is 51·10 miles long, and its gauge is 3 ft. 3 $\frac{3}{8}$  in. The ruling gradient is 1 in 100, with 1 in 40 in the Ghat section, where the line reaches an altitude of 3,000 ft. The line is single for 38 miles, but for the 13 miles in the Ghats it is double. There are 15 $\frac{1}{2}$  miles of sidings. A viaduct crosses the River Sonaulim at Dudsagor, close to the great waterfall. There are 12 tunnels.

The rolling stock consisted in 1916 of 18 locomotives, 48 carriages for travellers, 2 luggage vans, 1 horse-box, 119 covered goods wagons, 34 low-sided wagons, 9 platform wagons, 10 timber trucks, 9 brake vans, 1 travelling crane. The coaching traffic in 1916 showed an increase of 2·77 per cent. and the goods traffic 12·78 per cent. on the previous year, mainly owing to improved traffic in oil-seeds, cotton, manganese ore, and

salt. There were carried 417,744 passengers and 262,213 tons of goods.

The line, which is the property of the West of India Portuguese Railway Company, is maintained and worked by the Madras and Southern Mahratta Railway Company as part of the latter's undertaking, except as to further capital expenditure, which is provided by the Portuguese Government.

*Projected Lines.*—A branch line (3 ft. 3½ in. gauge), from Margão to Bicholim, has been sanctioned for survey with a view to developing the working of mines.

Negotiations have been opened with the British Government for a railway to link Port Karwar with Marmagão.

Some Portuguese writers strongly desire to bring a railway down to Gogola with a view to resuscitating the commerce of Diu, but there is no chance of such a line becoming remunerative.

#### (d) *Posts and Telegraphs*

The head post office of Goa is at Panjim ; there are branch offices at Margão, Mapuça, Ponda, Bicholim, Chinchinim, and Pernem.

A telegraph office at Panjim is maintained by the British and Portuguese Governments jointly, and is connected with the Indian cable. For inland communications there are 12 Government telegraph stations and 12 railway telegraph stations, and a total length of line of 224 miles.

### (2) EXTERNAL

#### (a) *Ports*

The chief ports in Goa are Marmagão and Panjim ; those at Damão and Diu are much smaller.

*Marmagão*,<sup>1</sup> the terminus of the West of India Portu-

<sup>1</sup> See also above, p. 10.

guese Railway, lies on the left bank of the River Juari near its mouth. It is sheltered from the south-west monsoon, an advantage which is shared by no other port on that coast. The breakwater which protects the harbour is 1,500 ft. long. East of it, good anchorage may be obtained in a depth of 4 fathoms. Small vessels may anchor in  $3\frac{1}{2}$  fathoms farther east. The port appears adequate for its needs as a terminus of the railway, considerable improvements having been recently made in the harbour. The breakwater has been extended to its present length; and the quay, which is of the same length, is being extended. The extension was almost completed in 1916, except certain parts which have been purposely postponed. A steam suction dredger has been established to meet Lloyd's requirement. There is one 25-ton steam-crane on the quay, and several smaller ones for loading. The railway company keep a small stock of coal, and will supply British ships when possible.

Coasting steamers call daily. In 1907, 1,080 vessels, of which 874 were British, with aggregate tonnage of 312,820, entered the port. In 1912, 75 ocean-going vessels, with a tonnage of 174,020, visited the port, of which 46 were British with a tonnage of 112,076 and 23 were German with a tonnage of 46,985; the other 6 vessels (3 Austrian, 1 Swedish, 1 Norwegian, 1 Dutch) had an aggregate tonnage of 14,849. The chief exports are caju-nuts, coco-nuts, fruit, salt, manganese ore, and cotton seed; the chief imports are coal, grain, pulse, cotton fabrics, kerosene oil, paper, tobacco. A good deal of the trade is in British hands. Marmagão is about 280 miles south of Bombay, 6,060 miles from Lisbon. It is the only port in Goa possessing railway connexions.

*Panjim*,<sup>1</sup> the capital of Goa for a century and a half,

<sup>1</sup> See also above, p. 10.

is on the island of Tissuadi, lying on the left bank of the River Mandavi, a little above the entrance of Aguada Bay. It is only available as a harbour for half the year, despite its deep water, because of its exposure to the south-west monsoons. There is anchorage for large vessels in 9 fathoms outside the harbour, and closer inshore by Aguada Head at three-quarters of a mile in 4½ fathoms. There is a sea-wall and quay, alongside which boats can lie at all states of the tide. The channel is buoyed, and a Government pilot is obligatory. The port is connected with Marmagão by a coasting steamer which rounds Cabo Point; Indian coasting steamers call daily. The trade is insignificant, but the town contains good artisans (see pp. 32, 42). The chief export is salt; other exports are caju-nuts, coco-nuts, fruit, spice, salted fish, gum, and coir-work; the chief imports are rice, cloth, sugar, wine, tobacco, and hardware. In 1903-4 the total number of ships entered was 2,874, and cleared 2,814.

*Damão*,<sup>1</sup> on both banks of the Damanganga, is of little importance as a port. It is unwise to enter it without a pilot, but vessels up to 500 tons sometimes moor abreast the forts. Anchorage can be obtained in 5 fathoms in Damão roads about 4 miles west of the lighthouse. Damão is a good place for small vessels to make necessary repairs. Many vessels of from 500 to 900 tons burden have been built in the Damanganga.

*Diu*<sup>2</sup> harbour is formed between the mainland and the eastern end of the island. It is exposed to the east, the holding-ground is indifferent, and vessels should not anchor there in strong easterly winds. There is anchorage in 3 to 4 fathoms about 1 mile east of Gogola.

<sup>1</sup> See also above, p. 11.

<sup>2</sup> See also above. p. 11.

*(b) Shipping Lines*

Most of the navigation from these ports is local, and coasting steamers are almost their only visitors. The railway company states that 13 ocean-going vessels made use of the port of Marmagão in 1915, and 9 in 1916. There is no Portuguese line between the mother country and any of these ports. From Bombay steamers of the British India Company and Shepherd's Company reach Marmagão in 26 hours. In normal times vessels of the Royal Dutch and Rotterdam Lloyd Lines called regularly at Lisbon, and transhipped passengers and goods for Goa at Colombo. The Strick Line had monthly callings at Marmagão, and there were occasional callings by the Spanish Transatlantic Company, principally for cargo. The German East African Company used to call once a month on the voyage between Bombay and Africa, carrying cargo and passengers.

*(c) Telegraphs*

There is connexion with the Indian cable, and so communication with Lisbon, the cost of telegraphing being 55 *centavos* (about 2s. 5d.) a word. The submarine cable is laid in the Mandavi River.

**(B) INDUSTRY****(1) LABOUR***(a) Supply*

The Goanese are well known as servants, and are so employed to a great extent in British India. Those who employ them are apt to make qualifications in their testimonials to character. In industry and application in the fields they differ to some extent in various parts of the country; those who live in



Ponda have the best name for diligence, but they are conservative in their methods. The same defect marks their work as artisans; they are able to supply local needs in sandal-making, but the work could be greatly improved by teaching.

(b) *Emigration and Immigration*

Emigration is mostly into British India and mostly from the Old Conquests. The numbers grew from 42,454 in 1906 to 47,430 in 1910. The emigrants are of various classes, most going as cooks, servants, and clerks, but some as doctors and lawyers. The money that they earn is sent back to Goa. They mostly retain Portuguese nationality, and do not naturalize themselves in British India, because they are Roman Catholics. Various causes have led to emigration in special localities. In Damão extreme poverty and a feeling that not only liberty but religious convictions were thwarted by various restrictions led to emigration into British territory. In Sanguem the locusts have made such depredations that whole families have migrated into British India.

The other chief objective of emigrants is Portuguese East Africa, where the Goanese clerk and the Banyan trader are familiar figures. From Diu some of the inhabitants migrate to East Africa, and return when they have made sufficient money.

There is little immigration. As has been seen above, there is a mere handful of Europeans in the country; in Diu there are only three. The Portuguese come to Goa either as soldiers or sailors, and do not bring their wives. There is great mixture of races, even in the army. The Europeans do not keep apart from the Asiatics, or even the Africans; their habitations are not even in different parts of the towns.

Travellers are greatly impressed with the distinction between Portuguese and British India in this respect.

Another very different kind of immigrants are the Banyans, a Gujarat caste of traders, who live in Diu, and whose ability in petty commerce is familiar alike in Asia and Africa. The Parsee usurers of Nagar Haveli have already been mentioned (p. 12).

## (2) AGRICULTURE

The condition of agriculture is not satisfactory. Considering the fertility of the soil and the possibilities of irrigation, much might still be done to develop the country. It suffers much from lack of transport. Beyond the radius of the navigable rivers there is little or none, and some parts, like Nagar Haveli, are practically devoid of means of communication; the railway serves much more to connect the British possessions of the interior with the sea than to open up Goa itself. No general figures of the agricultural output can be given, but the figures for particular districts and the table of exports serve in some degree to illustrate the actual position of affairs.

### (a) *Products of Commercial Value.*

*Vegetable.*—Goa falls into three zones: the wooded slopes of the Ghats; an intervening steppe region with short grass; and the lowlands up to the sea-shore. It is the last region which contains most of the cultivated crops. On the whole the land is fertile, but it has not been adequately developed. Only one-third of the total area is under cultivation, and of this only one-tenth will bear crops all the year round; the remainder is dependent wholly on the rains.

There are fine *forests* in the New Conquests, with a

total area of 116 square miles ; the best are in Pernem, Satari, Embarbacem, and Canacona. Even more extensive are the forests of Nagar Haveli, which are the property of the State. The principal timber is teak, which constitutes two-thirds of the Nagar Haveli forests ; there are four varieties of this, the hardest of which is *chicatia*. Teak is much used in boat-building ; the teak of Damão is better than that of Goa. The next commonest tree is that which is called *sadra* in Damão, and *mareta* in Goa (*Terminalia tomentosa*) ; its wood is of poor quality, but its leaves are used for feeding silk-worms and its bark for tanning fishing-nets. The jack (*Autocarpus integrifolia*) is next best to teak for its timber ; it is of value also for its fruit. Other trees of valuable timber are the *jumba* (*Inga xylocarpa*) ; *nanon* (*Lagerstroemia microcarpa*) ; *ker* or *pau ferro* (*Acacia catechu*, iron-wood), which is not attacked by insects ; *Bassia latifolia*, the well-known Mahawa tree ; *lal ker* (*Acacia sundra*), *babul* (*Acacia arabica*), and *sisso* (*Dalbergia sissooides*). The *babul* is not found much in the forests, but is usually solitary or dispersed in little groves over the plains. The *sisso* or rose-wood has suffered greatly from the reckless way in which the woodland has been treated.

Besides trees valuable for their timber, *fruit-trees* are numerous. Several kinds of palms grow in the territory, the most valuable of which are the coco-nut and the areca or betel palm. The coco-nut, which grows all along the coast and on ground not hilly nor used for rice, produces timber, fibre from its coir, leaves for thatching houses, copra, and the juice called *sura*, from which are produced a vinegar called *sirco*, a spirit called *cajulo*, and another alcoholic distillation called *finim*. A coco-nut tree can produce 94½ gallons of *sura* in a year ; one palm will produce 100 coco-nuts a year, and the *sura* can be extracted every

day. The value of coco-nuts, together with copra and coir, is very considerable. In 1905-6 it amounted to 300 *contos*<sup>1</sup> (£66,000), but against this must be set the fact that at the same time the deficit in cereals was just double that figure. The methods, also, of cultivating coco-nut are costly, as more is taken out of the soil than is returned to it in the form of manure.

The areca-palm (chiefly grown in irrigated lands in the New Conquests) produces seeds which are eaten with the leaves of the Piper Betel and hence commonly known as betel-nuts. In Ponda the yield of the areca is 80 rupees per acre, in Ilhas 59 rupees. But the export of betel-nuts is not what it used to be. From *caju*, a valuable fruit-tree, is derived *jagra* or jaggery, the coagulated juice which serves as a rough sugar. *Caju*, of which the export is on the average valued at 27,000 *escudos* (i. e. £6,000), is very important, but the trade might be considerably developed with more careful cultivation and better means of transport.

Other varieties of palm are the Palmyra palm, from which arrack is derived; the wild palm (*Caryota urens*), which also supplies jaggery, and the date-palm (*Phoenix dactylifera*), which supplies the edible date.

Among the other chief fruit-trees is the mango, which flourishes in Ilhas (where it yields 150 rupees per acre) and Sanguem, and supplies good timber as well as fruit. The jack has already been mentioned; the fruit is appreciated by natives but not by Europeans. The tree yields dye, fibre, fruit, timber, and spirit. The banana, of which there are three varieties, is grown especially in Bardez, where it has proved profitable. The tamarind must also be mentioned; and oranges and guava grow in Sanguem.

The *bamboo* grows in all parts of the country—there

<sup>1</sup> The word *conto*, originally *conto de reis* (i. e. 1,000,000 *reis*), is retained for 1,000 *escudos* (i. e. *milreis*).

are five varieties of it, out of the total of 117 to be found in India—and is invaluable for the number of things made from it. It grows entirely wild, and nothing is done to stimulate or control its production. *Tobacco* is grown in various parts of the territory.

The principal crop is *rice*, of which there are 32 varieties in the territory. It is grown in lowlands near the banks of rivers, on slopes of hills (*mollas*), in stiff grounds (*dulpan* or *dulip*), and in sandy soils. There are two crops in the year—one, called *serodio*, being sown in May and reaped in September, and another, called *vangana*, sown in December and reaped in March. The latter crop is in great part irrigated from rain-water reservoirs and wells. Some lands will bear both crops, especially reclaimed dune-land, which retains its moisture till the period of the rains; but the bulk is used for *serodio* only, owing to lack of manure and proper irrigation.<sup>1</sup> In spite of the double crop, the yield per acre is only 40 rupees. In Satari it is only 8 rupees. It is suggested that there should be more rotation of crops, that other products which are successful in the neighbouring parts of British India should be grown instead, and that, even if rice is cultivated to its present extent, varieties of rice that require less water should be grown.

Other *cereals* are grown on the hilly and inferior tracts, especially *bajra* (spiked millet), *kodra* (eleusine), *tori* (Indian rape), *gergelim* (sesame), two kinds of bean, *mung* (the Rangoon bean), and *urđ*, a pulse held in high esteem, of which the green pods are eaten as vegetables. *Nachinim* and *kulti* (horse gram) are grown in similar soils. *Chola* (chick-pea) is a very subordinate crop.

<sup>1</sup> In times of drought supplies of rice must be obtained, at great cost, from British territory; it is only when there is famine beyond the frontier that there is extreme distress in Goa.

In the villages are grown potatoes, radishes, yams, melons, cucumbers, and in some cases chillies, turmeric, ginger, and *brinjal* (egg-plant), which is used in curries, and eaten both by Europeans and natives when prepared in special ways.

*Sugar-cane* is grown in Goa, but not enough for the needs of the population. It has been argued from the analogy of similar parts of British India that sugar-cane might give 120 rupees per acre, but at present Goa imports the bulk of its sugar. *Wheat* requires a higher elevation than the cultivated lands of Portuguese India. Not enough has been done with *maize*; it will grow well in the Old Conquests and might be substituted for rice in certain parts, as it requires much less water and supplies more food for cattle. In Satari, besides the fields of cereals, there are plantations of cotton, cocoa, coffee, and cinchona. Some experiments have been made with *rubber*; there is the nucleus of a *hevea* plantation in the neighbourhood of Ponda; and individual proprietors have of late put down small experimental plots of both *hevea* and *castilloa*. It has been thought that *Hancornia speciosa* (which yields a third-grade rubber), approximating as it does so closely to *caju*, would grow wherever *caju* is found growing wild, and that it might well be planted in such places as the lower hills and table-lands of Ilhas, and in Bardez, north of the Mapuça River.

In Nagar Haveli, where at present rice and inferior cereals and vegetables are the principal products, and those grown by very rudimentary methods of cultivation, it is said that not only sugar-cane, but tobacco, *gergelim* (sesame), the castor-oil plant, wheat, hemp, flax, and millet could be grown. *Capim*, a hay-grass of these regions, might become valuable for its straw. At present, in Damão as a whole, only one-twentieth of the available land is under cultivation.

*Animal.*—The Portuguese authorities are vague in their description of the animals of this country. The fauna is said to be varied and the hunting abundant.

The domestic animals are horses, donkeys, goats, cattle, sheep, pigs, and domestic fowls. There is practically no cattle-breeding; and, whether for slaughter or labour, the cattle are imported. In 1906 there were imported for slaughter 8,363 head of cattle, with a total value of 66,904 *escudos* (£14,860); in the same year the goats, sheep, and pigs imported cost 7,400 *escudos* (£1,640). Also in the same year the value of the imported Indian butter was 18,000 *escudos* (£4,000). And yet the imports came from neighbouring lands enjoying no natural advantages over the Portuguese colonies, so that it would seem that enterprise in these directions would secure a legitimate reward.

#### (b) *Methods of Cultivation*

The Goanese is not a good labourer, and his work is not remunerative. As a rule he works the ground with his hands; only when the soil is very hard does he use the hoe; and the spade is unknown to him. The machinery, methods of irrigation, &c., now in use are primitive. The plough consists of a curved piece of wood, sometimes worked by hand, sometimes by oxen. It turns the earth to a depth that seldom amounts to more than 5 inches. The Old Conquests are usually better cultivated than the New.

The cultivated area does not produce sufficient to support the population. The deficit is made good by the earnings of the 25,000 to 30,000 residents who migrate to British India for work, remitting money to their families and returning to Goa when they have saved a competency.

Artificial fertilizers are unknown among the natives,

and the sanctity of the cow has hindered even the adequate use of cow-dung. Ashes, salt, and fish are the chief manures. The ashes are largely procured from the cutting down of trees and the lopping of their branches, which has proved so detrimental to the forests of the country. It may be added that agriculture suffers much from locusts and mosquitoes. The former have produced great impoverishment in Sanguem, causing the emigration of entire families into British India. The latter infest the marshy districts, especially those near the forests.

*Irrigation.*—In 1899, under the guidance of Governor Machado, a department of hydraulic services was created, and various schemes for irrigation, drainage, and the improvement of river navigation have been proposed, some of which (but none of great magnitude) have been carried out. The chief need has been for permanent reservoirs; at present the tanks (*lagoas*) which are constructed are filled for only a portion of the year, with the exception of very few, among which is that on the estate of the Conde de Malem. This tank measures 700 by 150 metres. Sr. Castelbranco has made a tour through the whole country, and points out the great possibilities of storage and irrigation canals that it possesses. One work of great importance has been partly executed—the irrigation canal of Paroda, through a rice-growing district. It is to be nearly 10 miles long and is to have branches that amount to another  $2\frac{1}{2}$  miles; it was expected that it would be nearly half finished in 1912. Eight reservoirs were to be constructed, and there is a project for a big reservoir in Sanquelim that will involve the removal of the little village of Quelim from its present site. At present the land has an elementary arrangement of dams that make a system of locks.



(c) *Forestry*

There is no scientific forestry, and the woods have suffered from the practice of *kumri* or shifting cultivation, when new land is cleared to replace old exhausted land, and *colvão*, where rights are conferred of lopping trees at a certain height. In the neighbourhood of the railway the woods have suffered material loss through the amount of timber which has had to be supplied to the company. In 1903-4 the revenue derived from forests, apart from timber supplied for State works, was £1,600, while the expenditure was £700. The forests of Nagar Haveli are not preserved, and their exact proportions are unknown.

(d) *Land Tenure*

It was stated in general terms at the beginning of the present century<sup>1</sup> that the condition of the agricultural classes in the Old Conquests had on the whole improved during the latter half of the nineteenth century, but that in the New Conquests there were many instances of severe oppression by the landowners and usurers (called *alcistas* in Goa and *saucares* in Damão). These latter obtain 75 per cent. of the earnings of the tenant as interest for the money that he borrows for purchase of food, seeds, cattle, and agricultural implements. The land is owned by the Government, the 'communities', other authorities (called generally *confrarias*), and private individuals. Governor Machado established a cadastral survey department because of the constant difficulties that arose between these various owners about the boundaries of their respective properties.

The communities (*comunidades*) were found by the

<sup>1</sup> See José de Nascimento Pinheiro, *Boletim da Sociedade de Geographia de Lisboa*, 1902.

Portuguese already existing, and are a very ancient institution, which may have been even earlier than the coming of the Mahrattas.<sup>1</sup>

Properties are small. Throughout Goa a holding of 15 or 16 acres is regarded as a good-sized farm; most are smaller. In the Old Conquests most properties are owned by private individuals; as property-holders the 'communities' come next, then other associations, and lastly the State. In the New Conquests the State owns about two-thirds, and is the owner of all land in Nagar Haveli and of a great deal in Diu.

### (3) MINERALS

*Goa.*—The territory is probably not rich in minerals, but it has been very little surveyed. The laterite which occurs in the chief geological formations of the country contains a certain amount of iron. It is found in Bardez, Satari, and Pernem, but especially in Embarbagem and Astagrar, where a great amount is extracted. More important is the extraction of manganese. In 1906 deposits of it were discovered near Marmagão, and there are six companies with about twenty mines at work.

*Damão.*—There are no useful minerals in Damão.

*Diu.*—In Diu there is clay for making tiles and other objects. Stone is extracted for building, but it is of poor consistency and easily crumbles.

Salt is the only commodity of which more is produced than is required by the inhabitants. The export is considerable; in 1911 it was valued at £7,494, in 1912 at £8,003. There are in these colonies 501 salt-works. Of these 171 are in Ilhas, 234 in Salsette, 73 in Bardez, 23 in Pernem; the number of men employed is 1,968. In Damão there

<sup>1</sup> For the curious history of these communities, see above, p. 20.

are 11 salt-works, employing 576 men; in Diu 8, employing 132. The total output is about 12,000 tons, and may be valued at 276,435 *escudos* (£61,430). Salt is used for salting fish (one of the other local industries); the inferior kinds serve for manure. Unfortunately the methods of production are very primitive; the salt-pans do not furnish as much as they might, and what they do produce is none too clean in appearance. Insufficient attention is paid to the channels that bring in the water.

#### (4) MANUFACTURES

Manufacturing industries are few. Some cloth is woven on hand-loom for local consumption. Formerly Damão did a great trade in cotton fabrics, opium, dyeing, and weaving. There is still some weaving done by wives of Mussulman sailors; piece-goods made from a mixture of English and country twist are exported to Goa, Diu, and Portuguese East Africa. The principal industry of Damão is mat- and basket-making from palm leaves and bamboo. Its other principal industry is deep-sea fishing, chiefly on the coast of Kathiawar, the fish being cured on board. Owing to the good timber of the neighbourhood, rough agricultural implements and carts are made here.

Among other industries of the Portuguese Possessions are the extraction of vegetable oils, the distillation of various kinds of spirits, the extraction of sugar from the small amount of sugar-cane which is cultivated, and of jaggery from palms, coir-making, tile-making and pottery (especially in Damão), rough agricultural implements, and a little copper- and other metal-working. In some villages there are carpenters, iron-workers, goldsmiths, sandal-makers, and tailors. Sandal-making has developed most among these indus-

tries, and is sufficient to meet the needs of the population. The art of the goldsmiths is rudimentary, but characteristically Indian. A man is a goldsmith, not because he has any special aptitude for that work, but because all his ancestors have been goldsmiths and he belongs to the goldsmiths' caste.

The occupations of Diu were formerly dyeing and weaving, and it was of commercial importance and populous, but it has sunk to insignificance, and its chief occupation now is fishing.

### (5) POWER

The only waterfall capable of affording a regular supply of power is that of Dudsagor in Embarbacem, which it has been proposed to use in order to supply power for a spinning and weaving factory; but complaint is made that the amount of water is insufficient, because in British territory the stream is used for irrigation purposes.

## (C) COMMERCE

### (1) DOMESTIC

The towns, few in number, act as centres for their districts; in the absence of good roads across the frontier, and of any means of transport away from the railway and river estuaries, they naturally have a restricted radius. Occasionally a fair of importance, as at Mapuça, makes a town a commercial centre for a certain period in the year. Other places, like Naroли, are centres for the agricultural products of the neighbourhood.

## (2) FOREIGN

The figures given below apply to the whole of Portuguese India, but are almost exclusively concerned with the two ports of Marmagão and Panjim and with the railway, the trade of Damão and Diu being almost negligible.

## (a) Exports

*Quantities.*—The last years for which the figures are given completely are 1912 and 1913. A comparison of those items for which the bulk is given shows how greatly the trade fluctuates from year to year. The principal export is coco-nuts, of which the number and not the weight is given. In 1912, 34,335,635 were exported from Portuguese India; in 1913, 36,180,230. With this trade are connected copra and coir. Of the former, 309½ tons were exported in 1912, 92½ tons in 1913; of the latter, 37½ tons in 1912, 17½ tons in 1913. Of rice, 878½ tons were exported in 1912, and 4,946 tons in 1913. Dried and salted fish remained more stationary, being 1,418 tons in 1912 and 1,355 tons in 1913. Caju-nuts amounted to 1,574½ tons in 1912 and 2,070 tons in 1913. In Damão the exports are valued at about £2,700 annually.

*Values.*—The average annual value of exports for the years 1910–14 was 953,696 *escudos*, which, reckoning 4½ *escudos* as =£1, would represent a value of about £211,932 (but the rate of exchange varies). The total value of exports in 1913 was 1,020,402 *escudos* (£226,756), and in 1914, 898,016 *escudos* (£199,559). The principal exports in 1913 were :

Coco-nut, 498,297 *escudos* (£110,732).

Copra, 51,348 *escudos* (£11,410); with coir, 6,919 *escudos* (£1,548).

Caju-nuts, 76,924 *escudos* (£17,094).

Fruits, 69,276 *escudos* (£15,506).

Rice, 51,350 *escudos* (£11,411).

Dried and salt fish, 68,871 *escudos* (£15,305).

Salt, 39,814 *escudos* (£8,848).

The other exports included minerals and live stock. Of the exports, caju-nuts, copra, coir, salt, fruit, and fish had shown an increase ; rice was nearly stationary, coco-nuts had decreased. Most exports are free of duty, but there is a small tax on caju-nuts, coco-nuts, and minerals. The export of betel-nuts has diminished in importance.

*Countries of Destination.*—Most of the trade is with British India, especially Bombay. The trade with Portugal itself is very limited. In 1911 and 1912 the value of exports was estimated as follows :

<i>To</i>	1911.	1912.
	£	£
British India . . .	166,734	148,611
Austria-Hungary . . .	2,726	160
Portugal . . .	649	137
Portuguese East Africa . . .	143	
Other countries . . .	560	

In 1916 the shipments direct to Europe amounted to 15,266 tons.

The trade is chiefly transit. The harbour of Marmagão and the railway from Castle Rock are the channel of nearly all the imports and exports. The amount of transit trade has depended mainly on the conditions made for the working of the railway. In 1892 the Portuguese repudiated the treaty of December 26, 1878, under which freedom of commerce, navigation, and transit between the territories of Great Britain and Portugal was established. But, although the Portuguese derived some financial advantage from this step owing to the freedom from treaty obligations, it seems to have been unwise to break away from commercial co-operation with British India.

## (b) Imports

*Quantities.*—No recent figures are available.

*Values.*—The value of imports averages more than three times that of exports. But the effect of this large excess, which might be expected to react unfavourably upon the financial position of the colony, is said to be counteracted in great measure by the money remitted by emigrants from Goa into British India, where they accumulate savings.

In 1910–14 the average annual value of imports was 2,880,639 *escudos* (about £640,142, reckoned on the same basis as the exports); the total for 1913 was 2,984,651 *escudos* (£663,256), and for 1914, 2,802,100 *escudos* (£622,688). The principal items in 1912 were :

	Rupees <sup>1</sup>	£
Grain and pulse . . . .	26,05,173	173,678
Sugar . . . . .	7,23,814	48,254
Cotton fabrics . . . .	7,16,618	47,774
Stamp-paper and stamps .	2,49,963	16,664
Tobacco . . . . .	2,36,170	15,745
Kerosene oil . . . .	2,12,781	14,185
Live-stock (oxen) . . .	1,88,098	12,540
Drugs . . . . .	1,26,795	8,453
Wines and spirits . . .	1,15,626	7,708
Jaggery . . . . .	1,10,814	7,387
Building material, tiles, &c.	1,05,713	7,047

*Countries of Origin.*—The principal contributor to the imports of Portuguese India is British India, the imports from which in 1912 were Rs. 65,55,320 (£437,021). The imports from Portugal fluctuate greatly. In the same year (1912) they were Rs. 3,45,787 (£23,052), which was more than twice as much as they had been the year before. The imports from Portuguese East Africa were valued at Rs. 7,406 (£494), and from

<sup>1</sup> In this table the value of the rupee is taken at  $\frac{1}{15}$  of the £, but it fluctuates very much for the purposes of foreign exchange.

the other colonies of Portugal at Rs. 10,461 (£697). Imports from the other countries in 1912 were as follows :

<i>From</i>	<i>Rupees</i>	<i>£</i>
United Kingdom . . . .	93,031	6,202
Germany . . . . .	28,220	1,881
France . . . . .	24,015	1,601
Netherlands . . . . .	10,339	689
British East Africa . . . .	8,294	553
China . . . . .	7,763	517
Norway . . . . .	5,808	387
Other countries . . . . .	3,646	243

The total showed a decrease of about two lacs of rupees compared with the year before.

Duties to the amount of about 220,000 *escudos* (£48,800) annually are levied on imports.

## (D) FINANCE

### (1) PUBLIC FINANCE

The Budget of the Portuguese colonies in India tends normally to show an expenditure somewhat in excess of the revenue :

<i>Year.</i>	<i>Receipts.</i>	<i>£</i>	<i>Expenditure.</i>	<i>£</i>	<i>Deficit.</i>	<i>£</i>
1901-2	1,019 <i>contos</i> (229,275)		1,028 <i>contos</i> (231,300)		9 <i>contos</i> (2,025)	
1902-3	957 <i>contos</i> (215,325)		1,074 <i>contos</i> (241,650)		117 <i>contos</i> (26,325)	
1903-4	984 <i>contos</i> (221,400)		1,151 <i>contos</i> (258,975)		167 <i>contos</i> (37,575)	
1904-5	972 <i>contos</i> (218,700)		1,110 <i>contos</i> (249,750)		138 <i>contos</i> (31,050)	

1 *conto* = 1,000 *escudos* (4s. 6d.)

There was an improvement at the end of the first decade of this century, and the figures for 1909-10 were :

<i>Receipts.</i>	<i>Expenditure.</i>	<i>£</i>	<i>Surplus.</i>
1,079 <i>contos</i> (242,775)	1,062 <i>contos</i> (238,950)		17 <i>contos</i> (3,825)

But the estimated revenue for 1916-17 was 1,060,398 *escudos* (£238,589 11s.), and the estimated expenditure



1,423,474 *escudos*<sup>1</sup> (£320,281 17s. 6d.), leaving an estimated deficit of 363,076 *escudos* (£81,692 6s. 6d.).

The sources of revenue are land-tax, customs, postal dues, seal and stamp duties, tobacco licences, taxes on liquor, salt, &c. The revenue from customs is pledged for the payment of interest on the construction of the railway from Marmagão.

## (2) CURRENCY AND EXCHANGE

*Currency.*—The coinage of the mother country was altered by a decree of the Provisional Government on May 22, 1911. The unit is now the gold *escudo*, of 100 centavos, which is equivalent to the 1-*milreis* gold piece, and is worth normally about 4s. 5½d. (but the rate varies; the average for 1915 was 3s. 0¼d.). The *reis*, which is the thousandth part of a *milreis*, but not coined, is no longer reckoned. A *conto* is the name for 1,000 *escudos*. There are gold coins of 2, 5, and 10-*escudo* pieces, silver coins of 1 *escudo* (0.835 fine) and 50, 20, and 10-*centavo* pieces, bronze and nickel coins of 4, 2, 1, and ½-*centavo* pieces.

The coinage of the colony has also been altered of recent years. It used to possess a silver coinage of *xerafins* and a copper coinage of *tangas*; and, by an arrangement made in 1840, salaries were paid one-third in copper and two-thirds in silver. From then till 1878 the value of money differed greatly in Goa and British India, while in Damão and Diu British coinage circulated in preference to Portuguese. A convention was made in 1878, by which the Portuguese coinage was remodelled on the basis of what circulated in British India. There is now a silver coinage of a rupee (180 grains Troy), ½ rupee, ¼ rupee, and ⅛ rupee

<sup>1</sup> Ordinary expenditure, 1,403,513 *escudos*; extraordinary, 19,961 *escudos*.

(tanga). There is a copper coinage of  $\frac{1}{2}$  tanga (200 grains),  $\frac{1}{4}$  tanga,  $\frac{1}{8}$  tanga, and real or  $\frac{1}{12}$  tanga. The name *xerafin* seems to be applied to the silver coin which is worth  $\frac{1}{2}$  a rupee, but a *xerafin* of copper is worth  $\frac{1}{3}$  of a rupee.

The *escudo* of gold is current in all the colonies of Portugal; the English pound sterling is also current at the rate of 15 rupees or  $4\frac{1}{2}$  *escudos*.

*Exchange*.—The depreciation in the value of silver and the fall in the price of the rupee have been very disconcerting to the business men of these territories. But the difficulty would have been very much greater, if it were not that the bulk of the business is done with British India. The coins of either country can be used in the other's dominions, and the value will be subject to the same fluctuations. The difficulty is considerably increased in the foreign trade, but for that the English pound sterling is largely used. The value of the rupee was fixed at first at 400 *reis*, but this was an exaggerated estimate, and in 1910 it was fixed at 350 *reis*.

By the convention of 1878 the Governor of the Portuguese colony was given full authority to circulate paper money of the face-value of 5 rupees in copper, and 10, 20, 50, 100, and 500 rupees in silver, up to the maximum of 4 per cent. of the value of the money in circulation.

### (3) BANKS

There is a branch at Panjim of the Banco Nacional Ultramarino. There has also been established a system of savings-banks (*Caixa Economica Postal*); in these the depositors have the right to interest at not less than 2 per cent., nor more than 5 per cent., per annum. The present rate of interest is fixed at 3 per cent. The smallest amount that can be deposited is 4 *tangas*.

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Osorio (1571) and Maffeus (1574), two ecclesiastics, wrote histories in Latin. Albuquerque's Commentaries, compiled by his son, are valuable, but to some extent superseded by his original letters, published in 1884. Two volumes of papers elucidating these have appeared. Faria y Souza, a rhetorical Spaniard, published a history in three volumes in 1674, but there is no further similar chronicle, and recourse must be had to original documents.

The so-called *Book of the Monsoons*, published by the Lisbon Academy in 4 vols., prints records from 1598 to 1618. The India Office has manuscript copies of documents under the same title from 1616 to 1651 ; and in the same office there are manuscript copies of Portuguese records under the following titles :

Conselho Ultramarino . . .	1614–1793
Gavetas . . . . .	1511–1711
Evora and Pombal Letters . . .	1572–1806
Noticias da India . . . . .	1475–1750
Corpo chronologico . . . . .	1500–1630

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Travellers have given us detailed accounts of Goa city and its social life ; the more prominent are M. Dellon, Pietro della Valle, John Fryer, François Leguat, Jean Mocquet, François Pyrard, Ludovico di Varthema, Sir R. Burton.

The contents of the magazine, *O Oriente Portuguez*, published

<sup>1</sup> Where untouched, his history is a valuable one, but it has been much mutilated and tampered with by interested persons.

in Goa, are valuable ; and the account of Portuguese India in the Bombay portion of the Indian Gazetteer is important.

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For Damão there is a map, on the scale of 1 : 250,000, in the Atlas Colonial Portugues of 1914 ; and sheets on the scale of 1 : 63,360, prepared from surveys between 1880 and 1895, are published by the Surveyor-General of India.

For the island of Diu the map in the Atlas Colonial Portugues is on the scale of 1 : 60,000 ; and the sheets on the scale of 1 : 63,360, published by the Surveyor-General of India, are prepared from surveys previous to 1880.

The Possessions are shown in four Naval Staff Intelligence Division Maps : (1) India (general), small scale ; (2) Damão, scale 1 : 500,000 (Ordnance Survey, Jan. 1919) ; (3) Diu, scale 1 : 125,000 (Ordnance Survey, Jan. 1919) ; (4) Goa, scale 1 : 500,000 (Ordnance Survey, Jan. 1919).

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## TABLE OF CONTENTS

	PAGE
<b>I. GEOGRAPHY PHYSICAL AND POLITICAL</b>	
(1) Position and Frontiers . . . . .	1
(2) Surface, Coast, and Rivers	
Surface . . . . .	1
Coast . . . . .	2
Rivers . . . . .	2
(3) Climate . . . . .	2
(4) Sanitary Conditions . . . . .	3
(5) Race and Language . . . . .	3
(6) Population . . . . .	4
<b>II. POLITICAL HISTORY</b>	
Chronological Summary . . . . .	5
(1) Early History	
First Mention of Timor . . . . .	5
Visit of Magalhães. . . . .	6
First Portuguese Settlement . . . . .	6
The Dutch at Kupang. Capital transferred to Dili . . . . .	7
Division of the Island between the Dutch and the Portuguese . . . . .	7
(2) Nineteenth and Twentieth Centuries	
Arrangements with the Dutch . . . . .	7
Agreement of 1893 . . . . .	8
Arbitration of 1914 . . . . .	9
Extent of Portuguese Territory . . . . .	9
<b>III. SOCIAL AND POLITICAL CONDITIONS</b>	
(1) Religious . . . . .	10
(2) Political . . . . .	10
(3) Educational . . . . .	10
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# TABLE OF CONTENTS

[No. 20]

PAGE

## IV. ECONOMIC CONDITIONS

### (A) MEANS OF COMMUNICATION

#### (1) Internal

(a) Roads and Tracks . . . . .	11
(b) Rivers . . . . .	11
(c) Posts and Telephones . . . . .	11

#### (2) External

(a) Ports and Anchorages . . . . .	12
(b) Shipping Lines . . . . .	13
(c) Telegraphic Communications . . . . .	14

### (B) INDUSTRY

(1) Labour . . . . .	14
----------------------	----

#### (2) Agriculture

##### (a) Products of Commercial Value

Vegetable Products . . . . .	15
------------------------------	----

Live-stock . . . . .	17
----------------------	----

(b) Forestry . . . . .	17
------------------------	----

(c) Land Tenure . . . . .	18
---------------------------	----

(3) Fisheries . . . . .	19
-------------------------	----

(4) Minerals . . . . .	19
------------------------	----

(5) Manufactures . . . . .	19
----------------------------	----

### (C) COMMERCE

#### (1) Domestic

(a) Nature of Trade . . . . .	20
-------------------------------	----

(b) Towns . . . . .	20
---------------------	----

#### (2) Foreign

(a) Exports . . . . .	20
-----------------------	----

(b) Imports . . . . .	22
-----------------------	----

(c) Customs and Tariffs . . . . .	23
-----------------------------------	----

### (D) FINANCE

(1) Public Finance . . . . .	24
------------------------------	----

(2) Banking . . . . .	25
-----------------------	----

(E) GENERAL REMARKS . . . . .	25
-------------------------------	----

AUTHORITIES . . . . .	26
-----------------------	----

# I. GEOGRAPHY PHYSICAL AND POLITICAL

## (1) POSITION AND FRONTIERS

PORTUGUESE TIMOR, which occupies the northern half of the island of Timor, lies between  $8^{\circ} 30'$  and  $9^{\circ} 30'$  south latitude and  $125^{\circ}$  and  $126^{\circ} 30'$  east longitude. The area of the main portion is about 6,325 square miles, and that of the Ocussi enclave, a territory belonging to Portugal on the northern coast of Dutch Timor, about 950 square miles. The island of Kambing, off the northern coast, also belongs to Portugal; its area is 55 square miles. The total area of the colony is thus approximately 7,330 square miles.

The boundary between Dutch and Portuguese territory is formed by a line drawn between the mouth of the Biku and the Talas, on the north and south respectively, which at its central portion makes a decided bend eastward. The boundaries of the enclave are lines running roughly north-east and south-west from the mouths of the Besi and the Meto respectively.

Fuller details will be found in *Dutch Timor*, No. 86 of this series.

## (2) SURFACE, COAST, AND RIVERS

### *Surface*

The mountains of Portuguese Timor, which are very bare and rugged, do not for the most part rise to more than 6,000–7,000 ft., though Ramelau, the highest point, reaches 9,000–10,000 ft. The soil is in parts rich, and lends itself to cultivation, but, partly owing to the porous character of the limestone of which

a great part of the country is composed, and partly to the erosive action of water, there is a large extent of sterile land. In many regions the want of water also proves a hindrance to cultivation. There are a few small shallow lakes, and in some places the lower courses of the rivers are swampy.

### *Coast.*

The seaboard of Portuguese Timor is some 500 miles in length, not including the Ocussi enclave (about 35 miles).

The mountains run parallel to the coast-line, and often come close to the sea, but there are, especially on the south side, places where the shore is low and sandy. The northern coast is more indented than the southern, which has only shallow bays.

Both coasts are lined by coral reefs, but there are places where ships may safely approach within a moderate distance. The only port of any account is that of Dili (Dilly). There are other bays which afford anchorage and shelter, during some winds, on the north coast; the south coast offers no shelter during the south-east monsoon, and is seldom visited.

### *Rivers*

The rivers are short and unimportant, none of them being navigable except for small boats at their mouths. They all flow north and south from the main mountain axis, and have rapid courses. Owing to the porous quality of the soil, they are of little use for irrigation.

### (3) CLIMATE

There are two seasons, that of the south-east monsoon, from May to November, and that of the north-west monsoon during the rest of the year. During the south-east monsoon, practically no rain falls in the north, but the north-west monsoon is accompanied

by violent rainstorms. No figures, however, exist for the rainfall of Portuguese Timor.

The hottest regions are the coastal plains, where the average temperature is about 80°–100° F. (26°–38° C.). Daily variations are considerable, especially at the beginning of the south-east monsoon. Portuguese Timor appears to be rather cooler than Dutch Timor.

#### (4) SANITARY CONDITIONS

The low marshy ground of the coast is very unhealthy, and malaria is common, but conditions in the interior are better. Above 2,000 ft. there are no marshes, and above 3,000 ft. no mosquitoes. On the other hand, above 2,000 ft. the European is attacked by hill diarrhoea; and it appears from a recent Portuguese report that the natives also suffer from ailments of a dysenteric kind, which sometimes carry them off in large numbers. The lack of good drinking-water and the unclean habits of the people doubtless conduce to this sort of disorder. A few regions of the island, particularly towards the east, are said to be possible for colonization on a small scale by whites, but even this is uncertain.

#### (5) RACE AND LANGUAGE

The natives of Portuguese Timor are wholly Belonese, and it has been suggested that their dark skin and shaggy curly hair are due to predominance of the Papuan element. Besides the natives there is a number of Portuguese, Chinese, and Arabs.

There is a great diversity of language. Over a considerable area Tetum is spoken, and it is generally used for official purposes. But a large number of other languages or dialects is known; and it frequently happens that the inhabitants of neighbouring 'kingdoms', separated by no natural boundary, speak different languages.

## (6) POPULATION

The population of Portuguese Timor was returned in 1915 as 377,815 (201,121 males and 176,694 females), with an average density of about 55 to the square mile.

The only town of importance is the capital and port, Dili (Dilly); otherwise it seems that the inhabitants live in small *kampongs* of about ten houses. In the Ocussi enclave, however, the *kampongs* are said to be larger. These settlements are usually situated in places difficult of access, owing to the general insecurity and the hostile relations obtaining between the numerous 'kingdoms' into which the natives are divided.

As to increase or decrease, it is impossible, owing to the extreme uncertainty of the figures, to say more than that there is an impression that the native population is gradually dwindling in numbers.

## II. POLITICAL HISTORY

### CHRONOLOGICAL SUMMARY

- c. 1516. First mention of Timor.
- 1520. Supposed foundation of Lifau.
- 1521. Visit by a ship of Magalhães' expedition.
- 1618. Dutch settlement at Kupang. Capital moved to Dili.
- c. 1700. Portuguese Governor appointed.
- 1769. Lifau besieged by 'Black Portuguese'.
- 1851. First agreement to settle the boundary. Cession of  
Larantuca to the Dutch.
- 1859. Treaty of Lisbon (April 20).
- 1893. Further agreements (June 10, July 1).
- 1899. Boundary defined.
- 1904. Later treaty.
- 1913. Appointment of M. Lardy as arbitrator.
- 1914. Arbitration award.

### (1) EARLY HISTORY

THE eastern portion of the island of Timor is the last fragment remaining to Portugal of her once extensive possessions in the Malay Archipelago. The western portion of the island belongs to Holland. Timor does not seem to have been considered at any time to be of great importance, and there are very few references to it in the writings of the older historians. The first mention is probably that by Duarte Barbosa, who wrote about 1516, and the information he gives is very scanty. It was at that time under its own pagan chiefs of Malay origin, and its principal product was sandalwood. Garcia da Orta, writing in 1563, says that Timor produced sandalwood in abundance, but

not the red kind. The best yellow sort was found. Ambergris also was collected in small quantities.<sup>1</sup>

The Portuguese obtained power in the island in the course of the sixteenth century. As the farthest east of the Lesser Sunda Islands, they no doubt regarded it as a useful port of call on their way to the Moluccas, which were of great value owing to their monopoly of the clove-trade.

The next recorded visit to Timor and the neighbouring island of Solor is that of Magalhães' expedition after the disasters in the Philippines in 1521. The *Victoria* (according to João de Barros, writing c. 1560) was guided by information given by a Portuguese named João de Campos to the island of Banda to obtain mace, and afterwards to Timor to obtain sandalwood. After leaving Banda they passed by Timor (apparently without landing), intending to pass through the Solor Channel (apparently the Flores Straits), and thence to sail straight across the Indian Ocean to Madagascar. This passing visit gives no information as to Timor, but it is evident that the island was well known to the Portuguese at that time.

Lifau in the western part of the island is stated by later writers to have become the capital of the Portuguese settlement so early as 1520. The Portuguese, however, do not appear to have occupied the interior, which has continued throughout to be almost independent. Except for their contest with Spain regarding the Moluccas, the Portuguese were supreme in the Eastern Archipelago until the later part of the sixteenth century, when the Dutch began to assert themselves. Here, as in some other places, clerical rule was very powerful, and was rather strengthened than otherwise under the Spanish regime (1580-1640).

<sup>1</sup> This agrees with J. H. van Linschoten, *Voyage ... to the East Indies* (1596), Hakluyt Society, LXX, LXXI, 1885.

The Dutch established themselves at Kupang (Koe-pang) in the western portion of the island in 1618, being aided by the civil war which broke out between the civil Portuguese government and the clerical elements, whose authority had become very great. After the fall of Kupang, the Portuguese capital was ultimately transferred to the port of Dili (Dilly) in the eastern part of the island. Attempts were made to recover Kupang with the assistance of the so-called Black Portuguese or Christians, who were mainly of native blood; but, owing chiefly to internal discords, these met with no success. A Portuguese Governor was for the first time appointed towards the end of the seventeenth century, and continued a struggle against these combined difficulties. This struggle went on through the eighteenth century, and in 1769 the Black Portuguese laid siege to Lifau. The Governor burnt the town down and retired to Dili. From this time forward, with the exception of a nominal sovereignty in the Ocussi enclave, the Dutch held the whole of the western and the Portuguese the eastern part of Timor; and in spite of occasional outbreaks of hostilities, this arrangement has continued till the present day. No definite frontier, however, was laid down until the middle of the nineteenth century.

## (2) NINETEENTH AND TWENTIETH CENTURIES

In 1851 the Governments of Portugal and the Netherlands determined to settle their dispute, and commissioners were appointed with this object. Lopes de Lima, representing Portugal, entered into an agreement (1854) by which he obtained a satisfactory frontier in exchange for the cession of certain Portuguese rights outside the island of Timor in addition to the payment of a sum of money. These rights consisted of the sovereignty over certain other islands in the Lesser



Sunda Archipelago, which included the Solor group and Flores. While awaiting sanction, Lopes de Lima anticipated it and actually made over these outlying dependencies to the Dutch. This cession included Larantuca on the eastern extremity of Flores Island, the earliest Portuguese settlement in this archipelago; and great resentment was aroused in Portugal. Lopes de Lima was held to have exceeded his authority. He was put under arrest and the arrangement was repudiated. On April 20, 1859, however, a treaty<sup>1</sup> was signed at Lisbon, and various so-called native 'kingdoms' were named as being on one side or other of the border. The Ocussi enclave remained Portuguese and the Mancatar territory Dutch. But the boundary was not surveyed, as neither the Dutch nor the Portuguese possessed sufficient authority in the interior to carry out a survey. This so-called settlement was therefore ineffective, the tribes on each side of the border continuing to assert their rights to territories on the other side.

A new agreement was come to on June 10, 1893, followed by a Declaration of July 1, 1893, the agreement providing for an Expert Commission to make proposals which should form the basis of a further Convention, with the intention of securing a clearly marked boundary and readjustment of various enclaves.<sup>2</sup> The Declaration provided for mutual rights of pre-emption. After the boundary had been thus defined, another treaty, in which certain enclaves were exchanged by the two Powers, was made in 1902. This again gave rise to disputes owing to differences of interpretation, and in 1913 these differences were submitted to the arbitration of M. Lardy, a Swiss member of

<sup>1</sup> See *State Papers*, vol. 50 (1859-60), pp. 1166-8, and G. G. Wilson, *The Hague Arbitration Cases*, p. 443.

<sup>2</sup> *State Papers*, vol. 85 (1892-3), pp. 394-6.

the Hague Court of Arbitration. His decision was given on June 25, 1914, and the boundaries are believed to have been laid down in accordance therewith. Under this arbitration all enclaves are abolished with the exception of that of Ocussi, which remains in Portuguese possession, and whose boundaries are now for the first time clearly laid down. Mancatar is transferred to Portugal, and Noemuti, Tahakai, and Tamiroe Ailala go to Holland.

### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

PORTUGUESE Timor forms part of the Catholic diocese of Macao, but since the Portuguese Revolution of 1908 the Church has been disestablished. The natives are mostly pagan, though sometimes professing Christianity. Fetishism is prevalent, and the spirits of ancestors, as well as the moon, the sun, the earth, and a deity called Maromatu, are invoked. Sacred places (*Uma-Luli*), supposed to be inhabited by a supernatural presence and presided over by a *Dako-Luli*, are found throughout the country; access to them is strictly forbidden to foreigners.

#### (2) POLITICAL

Timor (with Solor) was under the Governor of Macao from 1833 till 1896, when a separate governor was appointed.

#### (3) EDUCATIONAL

Primary education is given in schools (classified as regional, municipal, and missionary) at Alas; Baucau; Viqueque and Barique; Manatuto, Soubada, and Laleia; Suro; and Liquiçá. Instruction in all these is given in Portuguese and in the vernacular. The total number of pupils in 1915 was 806. There are also teachers (mostly missionaries) at Dili, Bidau, Lahane, Aipelo, and Laduta.

## IV. ECONOMIC CONDITIONS

### (A) MEANS OF COMMUNICATION

#### (1) INTERNAL

##### (a) *Roads and Tracks*

THERE do not appear to be any properly constructed roads in Portuguese Timor, apart from beaten high-ways and native tracks. The map in the *Anuario Colonial*, 1916, shows a road along the north coast of the colony from Dili, the capital, westwards to Maubára. Another road starts from Lacló, on the river of the same name, runs north to Manatuto and thence eastwards to Vemasse and Baucau, where it strikes inwards to Venilale. These are the only roads indicated. The *Atlas Colonial Português* (1914) shows no roads whatever. In any case the clayey surface of the lowlands, as affected by the scouring rains and torrential rivers of the wet season, makes the character of these 'natural' roads very uncertain. Landslides occur frequently; the natives say that 'the land of Timor is always falling'.

##### (b) *Rivers*

The rivers flowing to the north and south coasts from the high land of the interior are little more than trickles of water in the dry season, and become torrents during the rains. They are thus of no use as means of communication.

There are no railways.

##### (c) *Posts and Telephones*

The postal service is mainly with the outside world. In 1915 the number of letters received was 26,149, and

the number dispatched 14,949, the bulk of the correspondence coming from and going to Europe, Asia, Australia, and Oceania, and the other Portuguese colonies. Receipts exceeded expenditure by 141 *escudos*.<sup>1</sup>

There is telephonic communication between Dili and the various military stations and posts.

## (2) EXTERNAL

### (a) *Ports and Anchorages*

The only port of any account is on the north coast at *Dili*, where a natural harbour affords room for about a dozen vessels. Two coral reefs act as a breakwater, and there is one passage between the end of a reef and the coast at the west and another passage towards the east. The western is the larger and the principal entrance to the port; a lighthouse stands on the west point of the bay. In both passages the channel is well buoyed. The anchorage has a depth of 8 to 10 fathoms, while the tidal rise and fall is 1·8 metres. A pier opposite the customs-house has a depth of 8 fathoms at its end, but, owing to a structural defect, is available for boats only; however, landing is easy anywhere on the shore. The town has a supply of good drinking-water.

During 1915, ocean-going steamships to the number of 59 entered the harbour; of these 45 were Dutch from the Dutch islands and 13 English from English ports, while the single Portuguese vessel also came from an English port. The aggregate tonnage of these vessels was 91,154, the Portuguese ship being of 207 tons. They disembarked 627 passengers and 2,092 tons of merchandise, the latter worth about 324,123 *escudos*. These vessels, excluding the Portuguese ship, embarked in the course of the year 728 passengers at Dili, and

<sup>1</sup> The nominal value of the *escudo* is 4s. 5½d.

took from the colony 3,248 tons of merchandise, worth about 512,140 *escudos*.

The coasting trade is almost entirely confined to Portuguese ships, and all the steam vessels in the trade are Portuguese. In 1915, of the 340 coasting ships (including 17 steamships) which entered Dili, all were Portuguese except 30 sailing-vessels from the Dutch islands. These vessels landed 361 passengers and 2,489 tons of goods, valued at 261,000 *escudos*. There sailed in the same year 329 ships in the coasting trade, 16 being steamships and 30 Dutch sailing-vessels for the Dutch islands. They carried in all 500 passengers and 698 tons of merchandise, worth about 194,550 *escudos*.

In the same year 1 French and 4 English warships visited the port.

Some places which have small bays or anchorages are treated as ports, though in bad weather landing at these is impracticable. To this class belong, on the north coast, *Batugadé*, *Maubára*, *Liquiçá*, *Manatuto*, *Baucau*, and *Lautem*, with *Ocussi* in the detached district of that name, and on the south coast *Suai* and *Ventano*. The latter, however, are much exposed to storms, and on that account are little visited.

### (b) Shipping Lines

Apart from the various ships which visit the port of Dili, a regular service is supplied in normal times by one Dutch and one British steamship company. The boats of the *Koninklijke Paketvaart Maatschappij* call twice a month and link the colony with the neighbouring islands. By this means a connexion can be made at Batavia or Surabaya with the vessels of the *Rotterdamsche Lloyd* or the *Stoomvaart Maatschappij Nederland*, which arrive weekly at these ports and take it in turn to call at Lisbon. These vessels, however,

take passengers only for Portugal, so that goods destined for Lisbon must go to Hamburg or Amsterdam for trans-shipment to Lisbon. This is obviously a serious handicap. Connexion with Japan and China is afforded by the boats of the *Eastern and Australian Steamship Company*, which call at Dili on their outward and inward journey between Sydney and Yokohama every three months.

The one official steamer of the colony, the *Dilly*, makes two trips a month to ports east and west of Dili, carrying cargo and passengers.

It will be clear from what has been said that the steamship connexions with the outer world are not favourable to Portuguese interests. The difficulties, the delays, the loss in trans-shipment, and the heavy charges for freight, all tend to weaken the commercial ties between the colony and the mother country.

### (c) *Telegraphic Communications*

Portuguese Timor is not directly linked up with any cable or wireless system. Telegrams must be conveyed by one of the visiting steamers to Macassar, 96 hours distant, or Surabaya, just as far away, or Port Darwin in Australia, a journey of 36 hours, whence messages can be transmitted by cable. The delays and other disadvantages incident to such means of communication are obvious.

## (B) INDUSTRY

### (1) LABOUR

The Portuguese in the colony are officials, commercial agents, or agriculturists. Trading is largely in the hands of the Arabs and Chinese. The natives, who find it easy to satisfy their own simple needs in food and clothing, and are averse from working for others,

are described as idle. There appears to be a certain amount of compulsory labour on terms similar to those existing in other Portuguese colonies, but the quantity available and the results obtained cannot be ascertained. It has been proposed to introduce Chinese labourers, which would indicate that the efforts to secure native labour have been disappointing. There is a constant demand for porters, because of the deplorable state of the roads.

## (2) AGRICULTURE

### (a) *Products of Commercial Value*

*Vegetable Products.*—The natives support themselves mainly by agriculture, for there is little game to be hunted, and the climatic conditions limit the amount of pasture. *Maize* is the principal crop, but is grown merely in sufficient quantity to satisfy native needs, and on that account the plough is neither necessary nor known. It has recently been introduced, but apparently not for native use. Other products, less widespread, are *rice*, *millet*, *sugar-cane*, *manioc*, *sweet-potatoes*, some *corn*, *beans*, and *potatoes*, while there are several varieties of tropical and semi-tropical *fruits*, including the bread-fruit and the banana. The cultivation of rice is conducted by a system of irrigation, the irrigated land being churned into mud by driving buffaloes across it.

On the hill slopes grow *coffee*, *tea*, and *tobacco*, and the first of these is commercially by far the most important. It is said to be of the very best quality, and is grown specially in the hilly part of the north coast between the 'kingdom' of Motaél behind Dili and the River Lois to the west. The Government has shown itself anxious to develop the coffee industry, not only by increasing the number of its own plantations, but



also by constraining the natives to adopt a more systematic method of cultivation. The results of its efforts have not been very satisfactory. A report of 1910, however, affirms that by that time the State coffee plantations were not unsuccessful.

*Cocoa* first appeared as an article of export in 1910. There was a decline in 1912, but in 1913 the amount and value exported were three times as great as in the first year. Its future may, therefore, be regarded as promising.

The *coco-nut palm* is a feature of the flat southern coast, and is another object of the Government's interest. Copra, in fluctuating quantities, is prepared for export.

In 1906 *cotton* was said to take first place among the cultivated plants of Timor, where in the districts of Dili and Ermera alone more than 60 hectares were under this plant. No cotton, however, appears among the exports, so that all the produce is presumably put to local use in the manufacture of clothing. The plant, like tobacco, is said to grow wild in the colony.

In addition to the State plantations there were five private companies operating plantations in the colony. Of these the chief was the *Companhia Commercial e Agricola de Timor*, which in 1907 had 12,500 acres under cultivation, mostly in the Ermera district. On these were grown coffee, cotton, tea, tobacco, and coco-nuts, while experiments were being made in the cultivation of cocoa and rubber plants. The estates of the other companies were not on such a large scale, and their products were confined to coffee, cocoa, and coco-nuts. But all agricultural enterprises must reckon with the fact that there is little soil in the colony which lends itself to cultivation, and that what little there is alternates with stretches of poor or sterile land.

*Live-stock*.—Among the animals the most useful are *buffaloes*, *horses*, and *swine*. The buffalo is the principal working animal. The horse is a small pony, very hardy and sure-footed, which is prized in the Straits Settlements and in China, but is not now exported to the same extent as formerly. The number of cattle is not great, for the long dry season withers up all green stuff, except in the mountains and along the streams, to which places the natives are obliged at that time to drive their stock for pasturage.

There are great swarms of wild bees, from which the natives procure *honey* and *wax*, which is exported.

#### (b) *Forestry*

As the dry season, from May to November, is nearly twice as long as the wet season, while the latter is marked by heavy storms as well as rains, the climatic conditions are not favourable to the usual dense and lofty timber growth of the tropics. Instead, there are thickets of low wood and grassy savannahs, interspersed with trees, which, as well as the shrubs, are generally of Australian type. The commonest and most valuable of the trees is the *sandalwood*, but this species has been somewhat recklessly exploited for export. It is most numerous in the western part of the colony, namely, in the districts of Alas and Manu-Fai on the south coast, the hilly region round Bubo Naro and the Ocussi enclave on the north coast. Other trees are the *eucalyptus*, on hill and plain, the *casuarina*, or Australian oak, by the river courses, and the *bamboo*. *Rosewood* and *teak* are also said to occur.

*(c) Land Tenure*

Concessions and transfers of land in Timor are regulated by a special decree of December 5, 1910. This provision was made necessary by the remoteness of the colony from the mother country and the consequent delay in referring such matters to the home authorities. The Governor is made solely responsible for all grants of land on a quit-rent (*aforamento*) tenure, and for transfers of property up to 2,500 hectares in extent. Those who receive grants are bound to show that their concessions are being put to proper use—if agricultural land, that it is being put under crop in specified proportions; if pastoral land, that it is being sufficiently stocked; and if for building purposes, that buildings to a certain value are erected. For failure to comply with these conditions a fine is imposed, and for continued failure the unimproved land may be confiscated.

Foreigners applying for land must prove that they are domiciled in the colony, and make a declaration that they submit to Portuguese law in all that relates to the concession. District governors are empowered to make grants of unoccupied land up to 100 hectares, under certain conditions, to Portuguese subjects or foreigners taking up residence in the colony. These grants, too, must be made good by proper use.

The transfer of landed property from natives to other persons is not permitted without the express sanction of the Governor. But to establish a right to his property, the native occupier must cultivate or build upon at least half its area, and must have possessed it for a certain term of years, or have acquired it by legal transfer.

### (3) FISHERIES

The seas round the colony do not furnish many fish, but there is an abundance of zoophytes, molluscs, and crustaceans. Thus there is some fishing for *coral* and the *pearl-oyster*. As elsewhere in the archipelago, the *trepang* or sea-cucumber is found. This is sent in a dried state to China, where it is accounted a great delicacy.

### (4) MINERALS

*Copper* and *gold* are said to be present in workable quantities, but to be unexploited for lack of capital. Copper pyrites has been found at Mount Birogue, west of Baucau, while gold occurs both in ore and river-sand in the Bibicuso region near the centre of the colony. Farther west, in the district of Laleia, *iron* is said to exist. *Petroleum* seems to be present in some quantity, and is worked by an English company. There are wells in the Laclubar region, particularly about Pualaca, where the oil is used for lighting, and there are deposits in the district south-east of Baucau, while the presence of petroleum is indicated also at Suai and other places on the south coast. *Sulphur* springs occur at Marobo and Tiarlelo on the upper waters of the Marobo river.

### (5) MANUFACTURES

Apart from the salt-pans which the Government were said in 1907 to be working at Laga, east of Baucau, the only manufactures are those carried on by the natives for the production of articles for personal and domestic use, such as cotton *sarongs* for wear, made on bamboo looms, mats, ropes, pottery, &c., also sugar from the native sugar-cane, and some alcohol.

## (C) COMMERCE

### (1) DOMESTIC

#### (a) *Nature of Trade*

Trade in and with the interior is still carried on by means of barter. The natives fish up *trepang* and collect swallows' nests, which ultimately go as delicacies to China. They also collect the wild honeycomb.

#### (b) *Towns*

Dili, the principal port, is the capital of Portuguese Timor, and has about 4,000 inhabitants. Being surrounded by swamps on the land side, it has always had the reputation of being extremely unhealthy. Now, however, it is claimed that, since the swamps have been drained and an excellent water-supply provided, the health conditions of the place have been enormously improved.

The rest of the colony is divided into military districts, with their head-quarters at Ocussi, Batugadé, Liquiçá, Manatuto, Baucau, and Lautem on the north coast, and at Motaél, Hatu-Lia, Bubo Naro, and Same in the western region. Subordinate posts are placed in the small towns or villages.

### (2) FOREIGN

#### (a) *Exports*

The principal article of export is coffee, which in value is nearly worth all the others put together. Sandalwood and sandal-root come next, and then copra. Since 1910 cocoa has had a place in the list. The following table shows the quantities and values of the principal exports in 1911, 1912, and 1913:

	1911.		1912.		1913.	
	<i>Kilo-grammes.</i>	<i>Value in Escudos.</i>	<i>Kilo-grammes.</i>	<i>Value in Escudos.</i>	<i>Kilo-grammes.</i>	<i>Value in Escudos.</i>
Bees-wax .	34,127	19,263	28,103	14,265	26,387	10,850
Buffaloes .	(no.) 421	3,530	(no.) 89	480	—	—
Buffalo horn .	13,293	1,524	21,529	4,813	10,120	946
Buffalo skins .	50,086	6,978	30,315	4,423	—	—
Cocoa .	11,102	2,685	6,897	1,668	29,082	7,035
Coffee .	1,014,973	229,166	1,448,619	341,404	1,085,311	260,246
Copra .	900,929	58,145	625,895	44,194	566,265	45,699
Deer skins .	—	—	—	—	37,479	6,288
Horses .	(no.) 126	1,372	—	—	—	—
Sandal-root .	548,767	53,105	131,647	13,745	566,381	77,707
Sandalwood .	326,243	56,829	78,938	13,160	341,439	47,346
Stag horn .	13,613	5,942	—	—	10,395	1,848

The values of the total exports from 1911 to 1915 were as follows :

	<i>Total Exports.</i>	<i>To Portugal.</i>	<i>Re-exports.</i>
	<i>Escudos.</i>	<i>Escudos.</i>	<i>Escudos.</i>
1911 .	453,392	4,583	—
1912 .	458,162	22,248	—
1913 .	474,433	66,338	—
1914 .	252,625	—	6,592
1915 .	508,865	—	3,282

Two points should be noted in connexion with these figures. In the first place, it was shown by a writer in 1907 that the figures for exports were being returned at a higher rate than the actual market values. Coffee, for example, was reckoned at 16 *escudos* per *picul* of 136 lb., at a time when it was fetching only 10 *escudos* in the Dili market. Whether this criticism still holds good is not known. In the second place, though the nominal value of the *escudo* is 4s. 5½d., or 4½ *escudos* to the £, its exchange value has not reached that level during the present century. Its highest rate has been 5 *escudos* to the £, and during the war it fell as low as 8 *escudos* to the £.

A very small proportion of the exports goes to Portugal. The bulk of the import and export trade of the colony is done with the Dutch East Indies, and a much smaller part with Hongkong. Macassar, in Celebes, and Hongkong are the chief markets as well

as ports of transit for the colony ; indeed, the Macassar market controls prices in Timor. In 1910, out of exports with a total value of 453,000 *escudos*, goods to the value of 401,000 *escudos* went to the Dutch East Indies, and goods to the value of 41,000 *escudos* to Hongkong, leaving but a small balance for Portugal and other destinations. In the same year the exports to the United Kingdom from Timor were nil.

### (b) Imports

The chief imports are rice, alcohol, and textiles. The following table shows the chief articles received from Portugal in 1913 :

	<i>Escudos.</i>
Distilled liquors . . . . .	626
Fish, dried and salted . . . . .	339
Manufactured tobacco . . . . .	2,254
Oil . . . . .	668
Preserves . . . . .	4,519
Wines . . . . .	10,747

The values of the total imports from 1911 to 1915 were as follows :

	<i>Total Imports.</i>	<i>From Portugal.</i>
	<i>Escudos.</i>	<i>Escudos.</i>
1911 . . . . .	433,977	21,983
1912 . . . . .	609,110	77,937
1913 . . . . .	655,675	28,540
1914 . . . . .	394,647	28,937
1915 . . . . .	325,300	43,467

The carriage of dutiable imports in 1915 was distributed as follows :

<i>Portuguese Imports in Foreign Vessels.</i>	<i>Foreign Imports in Foreign Vessels.</i>	<i>Foreign Imports in Portuguese Vessels.</i>
<i>Escudos.</i>	<i>Escudos.</i>	<i>Escudos.</i>
43,467	269,663	10,255

The exports to Timor from the United Kingdom in 1910 were valued at £617.

(c) *Customs and Tariffs*

In Timor, isolated among Dutch and British possessions, and in so many ways dependent on them, Portugal has had to forgo her usual protective and preferential tariffs and adapt these to the circumstances. Thus the only preferences are on wine, preserves, and pickles. Portuguese wine enters free, while that of foreign origin pays an import duty of 30 per cent. *ad valorem*. Preserves and pickles from Portuguese sources pay an *ad valorem* duty of 1 per cent., and those from other sources 6 per cent. Such preferences apply not only to Portugal itself but also to Portuguese colonies.

All duties, export and import, are on an *ad valorem* basis, and those on imports are arranged in eleven categories, ranging from 1 per cent. on preserves and pickles to 80 per cent. on guns and gunpowder and 90 per cent. on opium. Furniture pays 5 per cent., flour and dried and salted fish 6 per cent., linen, woollen, and cotton textiles 10 per cent., but cotton textiles mixed with silk pay 25 per cent., and silk itself 50 per cent. Liqueurs and beer pay a duty of 30 per cent., and brandy, whisky, and gin pay 50 per cent. These last duties constitute a further discrimination in favour of wine. Tobacco is produced locally, and foreign leaf is charged 1,800 *reis*<sup>1</sup> per kg., or if manufactured, twice as much.

There is a long list of duty-free imports, among which are agricultural implements, building materials, whether of wood or iron (if cleared by the builders themselves), coal, sacking, machinery, tools, instruments, and apparatus for professional or industrial use, tubing or pipes of iron, lead, zinc, and earthenware, and their appurtenances for water, gas, and sanitary purposes.

<sup>1</sup> 1,000 *reis* = 1 *escudo*.



There are also export duties. Coffee is charged 2,520 *reis* (at par of exchange, about 11s. 2d.) per *picul* of 136 lb., wax 1,600 *reis* per *picul*, sandalwood about half that amount, while the other products of the island pay 5 per cent. *ad valorem*.

## (D) FINANCE

### (1) *Public Finance*

A deficit is a normal feature of the budget of the colony, and, as in the case of some other Portuguese colonies, has to be made good by the mother country. There is, accordingly, nothing exceptional in its appearance in the financial statements for 1914-15. The budget <sup>1</sup> for the financial year 1913-14 was made up as follows:

<i>Revenue.</i>	<i>Escudos.</i>	<i>Expenditure.</i>	<i>Escudos.</i>
Land-tax and direct taxation . . . . .	131,503	General administration . . . . .	63,590
Indirect taxation . . . . .	113,043	Justiciary „ . . . . .	5,218
Revenues from Government property and other sources . . . . .	26,257	Revenue „ . . . . .	25,920
Ear-marked revenues . . . . .	10,350	Ecclesiastical „ . . . . .	6,232
Subvention . . . . .	250,000 <sup>2</sup>	Military „ . . . . .	111,521
Treasury operations . . . . .	213,884	Marine „ . . . . .	16,661
		General charges . . . . .	3,200
		Miscellaneous payments . . . . .	83,565
		Non-recurring charges . . . . .	73,942
		Extraordinary expenditure . . . . .	50,677
		Treasury operations . . . . .	157,929
Total . . . . .	745,037	Total . . . . .	598,455

For 1914-15 the accounts were summarily as follows:

<i>Revenue.</i>	<i>Escudos.</i>	<i>Expenditure.</i>	<i>Escudos.</i>
Land-tax and direct taxation . . . . .	125,908	[Details not available.]	
Indirect taxation . . . . .	97,197		
Revenue from Government property, &c. . . . .	19,346		
Ear-marked revenues . . . . .	60,892		
Total (without subvention) . . . . .	303,343	Total . . . . .	337,457

<sup>1</sup> The figures are taken from the *Anuario Colonial*, 1916, pp. 169, 171.

<sup>2</sup> Of this subvention 200,000 *escudos* were arrears for the previous financial year.

The native 'kingdoms', until 1906, were subject to a tax, but, as this was paid only spasmodically, the form was thereafter changed to a poll-tax of 1 *pataca* (= 2s.) per head of the male population. How this works out is not specified.

Since the separation of the colony from Macao the latter has made an annual contribution to its revenue of 60,000 *patacas*.<sup>1</sup>

## (2) *Banking*

The only bank is a branch of the Banco Nacional Ultramarino at Dili. For a general criticism on the methods of this bank, see *San Thomé and Príncipe*, No. 119 of this series, p. 35.

## (E) GENERAL REMARKS

In the absence of a properly based estimate of the mineral resources of the colony, its potential value can be considered only from the agricultural point of view. Certainly its coffee is excellent, and there seems to be a promising field for the wider cultivation of cocoa and the coco-nut palm, the products of both having come into prominence in the returns of recent years. Cotton, too, seems to have possibilities, since, though not indigenous, it readily grows wild. But all economic development is delayed by the shortage of labour and capital. Under present conditions the natives will not provide the former; and the latter can scarcely be expected to come into the country while relations between the natives and the Government are so strained and uncertain, and while there is practically no system of internal communication and external communications are so limited.

<sup>1</sup> This item, however, does not figure specifically in the accounts of Timor.

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# TABLE OF CONTENTS

	PAGE
<b>I. GEOGRAPHY PHYSICAL AND POLITICAL</b>	
(1) Position and Area . . . . .	1
(2) Surface and Coasts . . . . .	1
(3) Climate . . . . .	2
(4) Sanitary Conditions . . . . .	3
(5) Race and Language . . . . .	4
(6) Population . . . . .	4
Towns and Villages . . . . .	5
<b>II. POLITICAL HISTORY</b>	
Chronological Summary . . . . .	7
(1) Early History . . . . .	7
(2) Recent History . . . . .	10
<b>III. SOCIAL AND POLITICAL CONDITIONS</b>	
(1) Religious . . . . .	12
(2) Political . . . . .	12
(3) Public Education . . . . .	12
<b>IV. ECONOMIC CONDITIONS</b>	
(A) MEANS OF COMMUNICATION	
(1) Internal	
(a) Roads . . . . .	15
(b) Railways . . . . .	15
(c) Posts, Telegraphs, and Telephones . . . . .	15
(2) External	
(a) Ports	
Accommodation . . . . .	16
Nature and Volume of Trade . . . . .	17
(b) Shipping Lines . . . . .	17
(c) Telegraphic and Wireless Communication . . . . .	18



# TABLE OF CONTENTS

[No. 81

	PAGE
(B) INDUSTRY	
(1) Labour . . . . .	18
(2) Manufactures . . . . .	18
(3) Fisheries . . . . .	19
(C) COMMERCE	
(1) Domestic . . . . .	19
(2) Foreign . . . . .	19
(a) Exports . . . . .	21
(b) Imports . . . . .	21
(D) FINANCE	
(1) Public Finance . . . . .	21
(2) Currency . . . . .	22
(3) Banking . . . . .	23
(4) Foreign Capital . . . . .	23
V. GENERAL REMARKS . . . . .	24
AUTHORITIES . . . . .	25
MAP . . . . .	26

# I. GEOGRAPHY PHYSICAL AND POLITICAL

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## (1) POSITION AND AREA

THE Portuguese colony of Macao (lat.  $22^{\circ} 11' 50''$  N., long.  $113^{\circ} 34'$  E. at the Fort da Guia) consists of the peninsula of Macao in the delta of Canton river, and the islands of Taipa and Colowan. The area of the whole is about  $4\frac{1}{2}$  square miles. The Portuguese also make certain claims to the possession of the island of Macarira or St. John, of the eastern coast of Lappa facing Macao, and of the northern part of Wongkam. The Chinese admit no claims to the possession of anything except Macao itself.

## (2) SURFACE AND COASTS

*Surface.*—The peninsula of Macao is about 3 miles in length; its greatest breadth is about 2,000 yards, and its perimeter about 8 miles. It is attached to the island of Heungshan by a narrow, sandy isthmus. The peninsula is hilly, and was probably at one time an island. It is dominated by the high hills on the island of Lappa. Two ranges of hills intersect it, one running from north to south, the other from east to west. The highest point is at Fort da Guia (333 ft.) on Mt. Cacilhas, where a lighthouse stands whose light is visible for 25 miles in clear weather. Potentially Macao is a place of great strategic importance, for it commands the chief avenue of approach to Canton.

The island of Heungshan is alluvial; the peninsula is of granite formation, with occasional felspar and quartz. At the lower levels, where the alluvial deposits of past ages made tracts of level ground, the soil is all formed of argillaceous and quartz sediments, due

to the erosive action of the water. It is a thin layer of soil, but clothed with vegetation. Taipa consists of two islands, joined together at low water. Taipa and Colowan are more arid than Macao; they have the same geological formation.

*Coasts.*—The coast on the east side of Macao is very irregular. On the north-east is the Praia d'Areia Preta, bounded on the east by the headland on which stands the fort of Donna Maria II, which separates it from the Bay of Cacilhas. Along the south-east side of the peninsula, where it begins to narrow, is the Praia Grande, three-quarters of a mile in length, with a sea-wall along it. It offers protection against the north-east monsoon, but is exposed to south and south-easterly gales. A breakwater is badly needed.

The fort of Bom Parto at the western end of the Praia separates it from the Bay do Bispo. The headland of Barra, with the fort of S. Thiago, is at the entrance to the inner harbour.

The western island of Taipa is harbourless. On the eastern island the Bay of Pak-on penetrates the northern coast. The big Bay of Taipa lies on the west coast.

The island of Colowan is penetrated by a considerable bay on the south-eastern side. A fort is built at the south-west extremity.

### (3) CLIMATE

From October to April the predominant winds are from north, north-north-east, and north-east, the monsoon being north-east; from April to October the winds are from south-south-west and south-east, the monsoon being south-west. It is during the south-west monsoon that the chief rains fall, especially between June and August. The climate is generally damp, the humidity being most felt in April and May.

Observations conducted for fifteen years at Macao show a scale of mean monthly temperatures from 61° F. (16° C.) in January and February to 85° F. (29° C.)

in July and August. The hottest month is usually August, the coldest February. The average rainfall is 69 inches.

The region suffers very much from typhoons. They come mostly between June and September, being especially frequent in July and September. Earthquakes are not unknown.

#### (4) SANITARY CONDITIONS

Being open to the south-west monsoon, Macao is much healthier than Hongkong; and many inhabitants of the latter place (40 miles distant) visit Macao for the sake of the greater coolness and quiet. The sanitary conditions of the town have been greatly improved. One piece of evidence for the healthiness of Macao is furnished by the fact that the French wished to purchase a property at Boa Vista in the north-east of Macao as a sanatorium for their officials in Indo-China; the scheme was abandoned, however, for political reasons.

There have been epidemics of plague, and in the summer of 1907 over 1,000 deaths were recorded. The municipality thereupon adopted strict sanitary precautions, which were successful; there were no cases in 1910-11, though there had been some during each of the previous eight years. The authorities are now turning their attention to malaria, and the low-lying ground east of the city with its stagnant pools is being filled in with soil from the Mong-ha hill. Near Green Island some 675 acres are being reclaimed, a work which will benefit the health of the colony, and add to the very restricted amount of the surface which can be used for cultivation. An outbreak of cholera followed the drought of 1902, and sporadic cases have occurred in subsequent years. Cases of plague, when notified, are removed to the plague hospital at Wanchai on Lappa Island. Leprosy sometimes occurs among the Chinese population; there are two leper hospitals, one for women on Colowan, and one for men on Macarira.

### (5) RACE AND LANGUAGE

The bulk of the population consists of Chinese, who need no special description. A Portuguese writer says that a feature of Portuguese colonization, instituted by Albuquerque himself and furthered by the authorities of the Church, is 'the procreation of a mixed, but legitimate and Christian race'. Such a race are the Macaists, or Nhons, as they are locally called, who have little physical resemblance to their Portuguese ancestors, and in whose veins runs Chinese, Japanese, and Malay blood, with some admixture of Spanish from the Philippines and British from Hongkong. They are an active and intelligent population, and have a preponderating influence in the colony. Many fill public offices not only in Macao but in Portugal and the other Portuguese colonies. They go in considerable numbers to Hongkong, and are employed in business houses there. The Macaists speak a Portuguese patois, very unlike real Portuguese. There are three forms of this dialect: (1) as spoken by the lower classes, (2) a form that approximates more to pure Portuguese, (3) as spoken by the Chinese.

There are several 'Portuguese' papers in the colony, said to be written in better Portuguese than those of Goa. There is also one Chinese newspaper.

### (6) POPULATION

The most recent census returns are for December 31, 1910. They give the following figures:

Total population of the colony, 74,866 (42,263 men, 32,603 women).

Chinese, 71,021.

Portuguese, 3,298: of these 2,171 were born in Macao, 996 came from Portugal, 131 from other Portuguese colonies.

Foreigners, 244, of whom 64 were British.

The population of Macao city was 63,991. The density of population on Macao is 16,459 per square kilometre; in Taipa and Colowan it is 211.

These figures show a decline from those of 1896. In that year the total was 78,627: the Chinese numbered 74,568, the Portuguese 3,898, of whom 3,106 were born in Macao, and foreigners were 161, of whom 80 were British. It is not known whether these figures included those who live in boats, a population of about 1,100. These were originally a pariah class, who were never allowed to land, and the manner of life has remained, although the necessity for it has been removed.

Up to 1896 the population had been increasing, the increase being especially among the Chinese, whose numbers had risen by 11,306 between 1878 and 1896. The numbers of Portuguese had decreased. Up to 1793 the numbers of Chinese were strictly limited, but now the Chinese are much the largest part of the population, and inhabit many of the fine old houses formerly occupied by wealthy Portuguese.

In 1900 the population of Taipa and Colowan was 12,894, mostly Chinese (there were only 92 Portuguese); Colowan has only about 1,200 or 1,300 inhabitants.

*Towns and Villages.*—The city of Macao is called by the Chinese of the neighbourhood Omoun, in Pekinese Ao-mên, and by the Portuguese, in full, Cidade do Santo Nome de Deus de Macau. It occupies about 520 acres, and accommodates about six-sevenths of the whole population of the colony. It is divided into a Chinese and a non-Chinese quarter, each under a special administrator; the former lies along the inner harbour and up the western slope of the hills; the latter along the eastern shore and on the tops of the hills. The town is extending northward. The Chinese quarter presents an animated appearance, especially along the harbour; it contains narrow, tortuous streets with low houses, giving the appearance of a mediaeval Portuguese town. In this region is the Rua da Felicidade, in which are the principal gaming saloons; over a score of these pay an aggregate tax of 170,000 dollars a year. The Chinese theatres of Macao are celebrated. The city as a whole presents

a very favourable appearance ; the streets are clean, the houses brightly painted with a variety of colours, the public buildings handsome. There are many fountains. At the north of the town, near the village of Patane, is the Grotto of Camoens, where the exiled poet wrote part of the *Lusiads* ; and this association gives the Portuguese their strongest sentimental interest in the colony.

In Taipa the bulk of the population is concentrated in the town of Tamtsai, in the south-west corner of the eastern island, where about 3,000 Chinese dwell. Colowan contains five small villages.

## II. POLITICAL HISTORY

### CHRONOLOGICAL SUMMARY

- 1515 (*circa*) R. Perestrello visits the Canton River.
- 1517 Arrival of Fernão Pires d'Andrade.
- 1524 Death of the Ambassador Thomé Pires at Canton.
- 1542 Portuguese settlement at Ningpo.
- 1557 Settlement formed at Macao.
- 1583 Establishment of Senate at Macao.
- 1622, 1627. Attacks on Macao by the Dutch.
- 1628 (*circa*) Appointment of a Governor.
- 1749 Portuguese admit Chinese criminal jurisdiction.
- 1833 Introduction of Portuguese colonial administration.
- 1845 Macao a free port.
- 1846 Ferreira do Amaral becomes Governor.
- 1849 Chinese custom house closed. Assassination of Amaral.
- 1862 Commercial treaty with China.
- 1874 Coolie traffic stopped.
- 1887 Portuguese sovereign rights recognised.
- 1896 Macao separated from Timor.

### (1) EARLY HISTORY

The first attempts of the Portuguese to open up communications with China were made after the conquest of Malacca by Albuquerque in 1511. A merchant named Rafael Perestrello, who made his way to China in a junk in 1514 or 1516, was believed to have been imprisoned; and the reports of Albuquerque induced King Manoel to despatch an embassy to make enquiries and establish a trading post. This task was carried out by Lopo Soares d'Albergaria, Albuquerque's successor, who sent Fernão Pires d'Andrade with a fleet to the Canton River in 1517. Before the expedition started Perestrello returned; and gave such a glowing account



of the profits to be made that great hopes of success were entertained.

Fernão d'Andrade took with him as ambassador a man of ability but of humble origin, named Thomé Pires, who paid with his life for the mistakes and faults of his superiors. A landing was made in August 1517 at one of the islands near the mouth of the river, which is called Tamão by the historians, and is said to have been called by the Portuguese Beniaga or Veniaga. Tamão was the place where all foreign vessels were detained for examination. Fernão d'Andrade seems to have been on friendly terms with the Chinese authorities of Canton, but left after fourteen months, having realised great profits, before authority had been received from the Emperor for the ambassador to travel to Pekin. Fernão's brother, Simão d'Andrade, who succeeded him, appears to have been an injudicious man who offended the Chinese in many ways; and, when at last Thomé Pires was allowed to go to Pekin, he was accompanied by bad reports and suspicions of espionage, which led to the total failure of the project. He was treated as a prisoner from the time of his arrival, and on the death of the Emperor was very roughly handled by his successor, who had learnt how the Portuguese had taken Malacca. In the end Thomé Pires was sent back under a guard to Canton, where he died in 1524. Simão d'Andrade had already departed, and the other Portuguese were expelled.

After a time, however, the Chinese were induced to allow occasional visits of Portuguese ships, which carried on a good trade from 1542 to 1548 at Chin-chew and Liampoo (Ningpo). But in 1549 the traders were forced to abandon the coast, some of them being killed or imprisoned. Negotiations opened up in 1554 by Lionel de Souza, accompanied by an agreement on the part of the Portuguese to pay Chinese custom duties, led to the reopening of trade; and finally, in 1557, the Chinese Governor sanctioned Portuguese occupation of the Macao peninsula. This arrangement is said to have been approved by the Emperor; but it seems quite

clear that the Chinese regarded the settlement simply as a trading station under their own authority, and did not recognise Portuguese sovereign rights.

The Portuguese, on the contrary, treated the Macao peninsula as their own property. Authority was at first exercised by the captains of the various fleets that visited it for trade; but in 1583 a municipal government was established in the form of a Senate, consisting of the principal residents. This Senate exercised all the functions of government until a Royal Governor was appointed, at a date variously stated as 1615, 1623, and 1628. The powers of this Governor seem, however, to have been limited to military matters, the civil administration remaining with the Senate. The Governor presided over the meetings of the Senate, but had no vote in its decisions.

The Chinese in 1573 had insisted on the erection of a rampart across the neck of the peninsula to check the incursions of bands of Portuguese slaves into the island of Heungshan, with which it is connected (*cf.* p. 1). In this there was only one gate, known as the Porta do Cerco. The Chinese, in fact, never ceased to regard Macao as part of their own dominions, and took advantage of every opportunity to introduce changes which led to the increase of their influence, even in the town of Macao itself. In the period of weakness and decay which set in during the seventeenth century the Portuguese often yielded to these encroachments in order not to endanger their profitable trade; and in 1749 an agreement was made which constituted a *modus vivendi*, one of its articles providing that European criminals should be surrendered to Chinese justice. Towards the end of the eighteenth century the Portuguese even yielded to a Chinese demand for the payment of tribute and the establishment of a Chinese custom house in the city; while a representative of the Chinese Governor of the island of Heungshan sat to administer justice among the Chinese residents of Macao.

After the accession of Philip II of Spain to the

Crown of Portugal in 1580, Macao was neglected, like other parts of the Portuguese dominions. It also suffered from the trade competition of the Philippines, which was favoured by the Spanish rulers. In 1622 the Dutch made a determined attack on Macao, but were successfully resisted, although at the same period they expelled the Portuguese from Formosa, where the latter had formed a settlement. Another attack was made in 1627.

The British East India Company had a large establishment at Macao; and its proximity to Canton made it a valuable place of refuge for the Europeans in that city at times of difficulty with the Chinese. In the Napoleonic wars British expeditions were twice sent to Macao, in 1802 and in 1808, to protect the place against threatened raids by the French. It is interesting to note that an ordinance passed in the early days of the British occupation of Hongkong (No. 1 of 1844) enacted that the peninsula of Macao should for the purposes of the ordinance "be deemed and taken to be within the dominions of the Emperor of China."

## (2) RECENT HISTORY

The modern history of Macao may be considered as dating from 1833, when the old system of administration was abolished. The general colonial system was introduced and the Senate reduced to the position of a municipality. Macao was formed into a province jointly with Timor, Macao becoming the capital. In 1896 Timor was, however, separated from it and formed into another government.

After the English war with China, the occupation of Hongkong in 1842, and the opening of treaty ports, it was considered necessary to make Macao into a free port. This step was taken by a Royal Decree of November 20, 1845, the first words of which were:

"The opening of some of the ports of the Empire of China to the commerce and navigation of all nations having put a stop to the propitious circumstances which favoured the commerce of the city of Macao."

It was also thought well to remove it from the control of the Governor-General of Goa, under which it had hitherto been. These measures entailed the abolition of the Chinese encroachments, and especially the custom house or Ho-pu. In 1846 Ferreira do Amaral was appointed Governor, and successfully carried out these changes. A new system of taxation had to be introduced to make good the revenue which had been derived from duties. The islands of Taipa and Colowan were occupied at the same time. Chinese resentment was intense, and Amaral was assassinated in August 1849. There were several bodies of Chinese troops in the neighbourhood, and the fort known by the name of Passaleão was strongly garrisoned; the occupation of Macao by the Chinese seemed imminent; but a sudden *coup de main* struck by Lieutenant Mesquita and a handful of soldiers, who seized this fort, restored confidence, and allowed defensive measures to be carried out.

In 1887 Portuguese sovereign rights were at last formally recognized by China. The question of the delimitation of the boundaries, however, remains unsettled. Portugal claims, in addition to the peninsula, the islands of Taipa and Colowan, the eastern part of Lappa (west of the inner harbour), the small island of Dom João (west of Taipa), and the north part of Wongkam, which lies west of Colowan. Authority over Colowan was asserted in 1910 by the clearing away of a band of pirates which infested the island. These territories are necessary to give complete control of the harbour.

### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

Macao is the seat of a Roman Catholic diocese which includes Timor, and has superintendence over the Portuguese congregations of Malacca and Singapore. Under the Republic the Church has been disestablished, as elsewhere in the Portuguese dominions. The great bulk of the population is Chinese, and does not differ in respect of religion from that of independent China. A large number of the Chinese, however, are Roman Catholic, and have adopted European Christian names.

#### (2) POLITICAL

The province of Macao is under a Governor, assisted by two Councils—one for the city and one for Taipa and Colowan. The city is divided into the Chinese and European quarters, each of which has a separate administrator. The Council of Taipa and Colowan is really a municipality under a president, who is at the same time the Military Commandant. The Senate or Municipal Assembly has authority over both Councils.

#### (3) PUBLIC EDUCATION

There are a large number of educational establishments in the colony, but the expulsion of the religious orders in 1910 has introduced much confusion into the organization both of education and philanthropy. The government of the province maintains a national Lyceum at Macao; it also supports a female school, a commercial school, and a school for Chinese pupils in which both Portuguese and Chinese are taught. The

Town Council of Macao maintains a school of primary instruction for each sex, a commercial school attached to the Lyceum, and a school in Portuguese for Chinese. The diocese of Macao maintains eight schools, seminaries, and orphanages, two of which are in Taipa and one in Colowan. The Council of Taipa and Colowan also maintains a school of Chinese and Portuguese for Chinese pupils.



## IV. ECONOMIC CONDITIONS

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### (A) MEANS OF COMMUNICATION

#### (1) INTERNAL

##### (a) *Roads*

THE roads are good in Macao, but, as soon as the barrier is crossed, the well-kept Portuguese road is continued by a miserable footpath. A great difficulty in making new roads is the number of Chinese graves, the disturbance of which arouses violent feelings; the removal of such graves to make new roads was one of the chief causes of the assassination of the Governor Amaral in 1849.

The principal means of locomotion are jinrickshas and palanquins borne by two carriers.

##### (b) *Railways*

The project for a railway to Canton agreed upon with the Chinese Government in 1901 seems to have been abandoned. A later project to build a railway from Canton to Macao, with Chinese and British capital, was agreed upon in 1913, but is still in suspense owing to lack of capital, and pending settlement of the boundary dispute.

##### (c) *Posts, Telegraphs, and Telephones*

The post office used to be in the hands of a private individual, but is now worked by the Government.

The Eastern Extension Australasia and China Telegraph Company has an office at Macao, and there is both telegraphic and telephonic communication



between the city and Taipa fort and village. There are several agencies of the Chinese post office in the immediate neighbourhood, including a telegraph office at Tsinshan.

## (2) EXTERNAL

### (a) Ports

*Accommodation.*—The inner harbour is formed by Macao peninsula on the east and the island of Tui-mien Shan (Lappa) on the west. It is about  $1\frac{1}{2}$  miles in length and 600 yards wide, narrowing to  $\frac{1}{4}$  mile at the entrance. It has two to three fathoms depth on the town side, but is encumbered by sandbanks on the west. The entrance is shallow and made difficult by a sandbar. The harbour is getting rapidly silted up by fluvial deposit; it was calculated in 1883 that in 25 years the harbours of Macao had been laden with no less than 69,000,000 metric tons of alluvium, and within an even shorter period depths marked in a British Admiralty chart as from 9 to 10 ft. at neap tide were found upon survey to be only  $5\frac{1}{2}$ . In 1909 the Lisbon Government began a grant of annual appropriation for improving the harbour, and in 1911 entered into a contract with a Hongkong engineering firm to dredge a channel 6,000 metres long with a uniform depth of 12 ft. Since then the channel has shoaled again, and in 1915 a sea-going dredger was ordered. The approach to Point Barra is a channel from the north-east, 111 ft. wide with a depth of 11 ft. at low water. The approach will be considerably improved if the project of a breakwater from Taipa Island to Pedra d'Areca, between it and Macao, is executed. At the north end of the harbour between Green Island and Macao a typhoon harbour for small craft has been dredged.

South of Macao, between it and Taipa, is the outer harbour, known as the Rada. There is an outer anchorage in about 4 fathoms, with mud bottom, about 7 to 8 miles east-south-east of Fort Guia. A

good number of fishing junks are to be found in the Bay of Taipa, anchored by the town of Tamtsai. The Praia Grande is fringed with small vessels in fine weather ; and some protection is afforded these against the north-east monsoon.

The tides round Point Barra at the entrance to the harbour run strongly. Spring tides rise  $9\frac{1}{2}$  ft. and neaps  $6\frac{1}{2}$  ft. The inner harbour faces south-west and is not entirely immune from storms. In June 1913 a squall of extraordinary severity struck it, causing steamers to break adrift from their moorings and working havoc among the floating population, whose *sampans* were upset.

*Nature and volume of trade.*—The harbour is filled mainly with junks, and all kinds of minor vessels such as *sampans* and *tankas*. In 1913 the port of Macao was visited by 4,110 merchant steamers of 1,008,814 tons and 13,389 junks of 303,764 tons.

### (b) Shipping Lines

The Hongkong Canton and Macao Steamship Company run two steamers daily between Macao and Hongkong ; the distance is 40 miles, and the journey takes 3 hours. A Chinese company also has a daily service between the two ports. There is a daily steamer service (Saturdays excepted) between Macao and Canton (88 miles). There used to be a regular service to Kongmoon, but this ceased in April 1915. There is direct communication with the French possession, Kwangchowwan. The Stoomvaart Maatschappij Nederland has fortnightly sailings, taking up passengers at Singapore.

With the various towns in the delta and on the river routes there is launch and junk traffic, besides a considerable coasting trade.

Steamships cannot obtain patent fuel or liquid fuel at Macao, and only a small amount of coal (about 50 tons) is kept in stock.

(c) *Telegraphic and Wireless Communication*

Macao is connected by cable with Hongkong. The wireless station (a low-power Telefunken station with a radius of about 100 miles) near Kwanchiap, on the road from Macao to Tsinshan, had been rebuilt and was in operation in 1915, for official use only.

(B) INDUSTRY

(1) *Labour*

The industry of Macao is mainly in Chinese hands. The Chinamen in Macao are as a rule thrifty, hard-working, and orderly; wages are higher than in the neighbourhood, ten dollars a month being the lowest wage for unskilled labour; house-rent is said to be cheaper than in Hongkong. The only form of agricultural industry is market-gardening.

(2) *Manufactures*

The chief industry is opium, which the colony imports raw (*opio cru*) and prepares for exportation (*opio cosido*). The opium boilery is the monopoly of a Chinaman, who pays 250,000 dollars a year to the Portuguese Government. Considerable restrictions have been put by the Chinese Government on the opium trade, but a good deal of smuggling goes on. The preparation of tea is another important business; the fresh-picked leaves arrive from the plantations in the country, and are subjected to the various processes of picking, firing, and curling in native *hongs* (houses), being finally packed to suit the different markets according to demand. The tobacco factory at Macao is one of the largest in South China; near it, in the same industrial quarter, is a silk filature business, which is in Chinese hands. There are also rice-mills, a certain amount of boat-building, and manufacture of mats (*esteiras*) and fireworks (*panchões*). *Samshu*, a Chinese drink, is manufactured in the colony.

On Green Island is a cement and brick factory worked

by the Green Island Cement Company, of Hongkong. It suspended operations for some time, but re-opened in 1915; before its suspension it employed 700 Chinese workmen, and its monthly output was 1,100 tons of cement. The Portland cement produced in Macao is of a very superior quality and largely used in that part of the world. The limestone for the cement is obtained from the provinces of Kwangtung and Kwangsi, and the clay in the inner harbour itself, just in front of the works. Most of the output goes to Manila, Hongkong, and various parts of China and Japan.

### (3) *Fisheries*

Fish abound in the waters round Macao. The activity of the fishing industry has been increased lately because of the migration of fishers from Hongkong to Macao in order to escape irksome restrictions during the war, and because of the increased demand for fish to replace other forms of food not obtainable owing to the war or the bad floods of the Canton River delta. Fishing employs about 920 vessels and 8,700 hands; the fish is exported fresh, dried, or salted, these last two methods providing a large amount of employment. The drying is principally done in Taipa.

## (C) COMMERCE

### (1) DOMESTIC

There are several markets, but the only important one is S. Domingos'. Macao is a city of monopolies, most of which are in the hands of Chinese; among these is the whole trade in kerosene oil, gunpowder, and jinrickshas.

### (2) FOREIGN

Until about forty years ago the chief export and import trades of Macao were respectively coolies and opium, but the first was made illegal in 1874, and the

second has become restricted, though both in its legitimate and illegitimate forms it is still of great importance. The loss, in 1864, of the privilege of importing rice free of the Chinese export duty was much felt in the colony. The principal function of the commerce of Macao is now to prepare products to be exported so as to suit the taste of the consumer and to condition them to resist the effects of the voyage. Piracy used to be a great foe to Macao commerce; it is now to some extent its friend, for the piracy in the neighbourhood of the West River has had the effect of driving part of the local trade to Macao, some of the junks preferring to trans-ship their cargo there rather than proceed to Kongmoon direct. In recent years Macao has had to suffer a good deal of competition. There is also a tendency for a portion of the west coast produce to go *via* Kongmoon, whether destined for Hongkong or Canton; and the old junk trade of this region with the foreign colonies is gradually disappearing.

Macao is a free port, and it is difficult to obtain any accurate figures of its exports and imports. It lies within the Lappa customs district of China, and in the figures for the Lappa district the exports and imports of Macao are included among those of Hongkong and foreign countries generally. In the period 1911-15 the average annual value of the total volume of trade passing through the Lappa customs station amounted roughly to £2,250,000. All that can be said is that the trade of Macao would account for the greater part of this total.

The floods in the delta during 1915 in some ways stimulated Macao trade in that year. Thus pigs increased from 36,032 to 50,531; they were exported from the lower prefectures to Macao and thence re-imported; on the other hand, export of paper and fish was diminished by reason of the flood, and there was a decrease in the export of oysters, because the oyster-beds were damaged by the flood. In 1915, 793 steamers and 16,482 junks cleared at Lappa. Of the latter 2,011 were from China to China, 14,471 were to and from

Macao and Hongkong, of which 768 (87,351 tons) traded between Macao and Hongkong, and 6 were engaged in the trade between Macao and Indo-China.

### (a) *Exports*

The chief exports are: to Hongkong timber, oil, tea, tobacco, mats, nankeen, fireworks, incense, fowls, eggs; to Canton betel-nuts, cement, and fish; to Kwangchowwan cotton and petroleum; to Chinese ports oil, rice, sugar, cotton, cotton-stuffs, cotton-yarn, fish, tobacco, nankeen.

### (b) *Imports*

The chief imports are: from Hongkong rice, oil, tea, opium, flour, cotton, cotton-stuffs, cotton-yarn, munitions, gunpowder, saltpetre, sugar, European wines, medicine, and petroleum; from Canton silk, fruit, eggs, bricks, timber, mats, tea; from Kwangchowwan pigs and basket-work; from Chinese ports timber, fruits, silk-stuffs, incense, mats, tobacco.

The number of chests of opium imported from Hongkong during the years 1911-15 was:

1911	1912	1913	1914	1915
1,211	301	450	750	508

Tea is imported from China and prepared in Macao for foreign markets. It goes almost exclusively to British ports, and not at all to Portugal.

## (D) FINANCE

### (1) *Public Finance*

The revenue for 1913, according to the *Anuario Colonial* of 1916, amounted to 897,079 *escudos*<sup>1</sup> (£198,000), of which the main item was 811,534 *escudos* (£179,000), under the head of 'contributions and direct imposts', the other items being 'indirect imposts, national property and miscellaneous revenues, and

<sup>1</sup> The Portuguese *escudo* is worth normally 4s. 5½d.

pecially ear-marked revenue'.<sup>1</sup> By far the largest amount of the direct imposts is derived from gambling; in 1912 the receipts from *fantan* amounted to nearly half, and the receipts from lotteries to nearly a third of the direct imposts, the next most important source being the monopoly of the preparation of opium. Other monopolies include the sale of fish and salt, which are practically the only local produce. The farming of monopolies is a cheap means of raising revenue, whereby the Government secures a rent without the expense of administration. The other imposts are complicated and not easily understood by a people like the Chinese, whose habits and ways of thought are so totally different from those of any nation in the Western world.

In 1913 the expenditure amounted to 609,430 *escudos* (£134,000). It will thus be seen that Macao, unlike most Portuguese colonies, pays its way. After its separation from Timor in 1896 it still continued to make a contribution to the revenue of that colony of 60,000 *patacas* (£6,000), which would amount in some years to almost a third of the receipts of Timor.

## (2) Currency

The chief coinage in use in the colony is the Hong-kong dollar, which is worth about 2s. 2d., and the *pataca* or *peso duro espanhol*. The latter was formerly calculated as equivalent to 720 *reis*; but, as the finances of the colony suffered because its receipts were reckoned in *patacas* and its expenses in *reis*, the Government decided that in all payments made by the exchequer the *pataca* should be the equivalent of 850 *reis*. With the depreciation of silver this proved an exaggerated value. It was then fixed at the value of 640 *reis*, and later (in 1910) at that of 450, so that it is about 2s. in value.

<sup>1</sup> e.g. the receipts from the monopoly of the sale of gunpowder and petroleum, which are applied exclusively to harbour improvements.

Values are usually reckoned in *Haekwan taels*, the *tael* being a measure and not a coin. Its value in the Lappa district was computed in 1915 as 2s. 7½d. Fifteen years ago it exchanged for 1,420 *cash* (a small Chinese copper coin) or 150 *cents*. As the *cash* became scarcer, their value rose, while the increasingly minted *cents* depreciated, so that in 1910 it exchanged for 1,350 *cash* or 180 *cents*. Silver has depreciated not only in reference to gold, but also to copper.

### (3) *Banking*

The Banco Nacional Ultramarino has a branch at Macao.

### (4) *Foreign Capital*

As has been said above, many of the industries of Macao are Chinese monopolies. Besides these the principal businesses that are in other than Portuguese hands are the Green Island Cement Company, of which the head office is in Hongkong; the Eastern Extension Australasia & China Telegraph Company, whose head office is in London; and a branch office of the London firm of Herbert Dent & Co., public silk and tea inspectors and commission agents.



## V. GENERAL REMARKS

MACAO owes its whole importance to the fact that it is a port; but as such it cannot long remain of much value, for the harbour is being silted up by the alluvium brought down the Canton river; and, though it is being dredged, it must eventually share the fate of Kongmoon, which is now 30 miles inland, though once a maritime city. The works undertaken in the harbour by the Portuguese lead to friction with the Chinese, who contend that a definite clause in the agreement between the two Powers debars such operations.

Macao's internal trade is all in the hands of the Chinese. The territory is too limited to admit of any considerable expansion of the town, or to afford space for the establishment of industries on a large scale.

But though the colony's advantages are necessarily circumscribed and of precarious duration, the Portuguese attach a sentimental value to its possession that goes far beyond its commercial importance. Not only is Macao a long-cherished possession, but it was for a time the residence of Camoens, their national poet, with whom the glories of their former Empire are inseparably bound up.

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## MAP

A map of Macao, on the scale of 1 : 80,000 (G.S.G.S. No. 2874) was issued by the War Office in July 1918 in connexion with this series.

# INDEX TO VOL XIII.

*The figures in heavy type give the number of the books referred to, those in lighter type the page.*

## A.

- Abadan Island, *see* Karun.  
 Abbas, Shah, agreement with Great Britain, 1622, **76**, 67; Portuguese expelled from Hormuz by, 1622, **76**, 58.  
 Abbasi language, **76**, 36.  
 Abdool Jalil bin Syud Yas, **76**, 80.  
 Abdoola bin Ahed, Sheikh, **76**, 80.  
 Abdoola bin Rashid, Chief of Umm-ool-Keiweyn, **76**, 80, 81.  
 Abdul Wahab (or son), founder of Wahabism, 1742, **76**, 48-9.  
 Abdullah, Sheikh of El-Katr, proclamation *re* arms traffic, **76**, 75; treaty with Great Britain, 1916, **76**, 75, ratification, 1918, **76**, 75.  
 Abdullah, Khor, **76**, 13.  
 Abu Dhabi, **76**, 1 note, 4, 8, 9, 80; population, **76**, 31; Sheikhs of, **76**, 43, 72, attack on El-Katr, 1867, **76**, 46; tribes, **76**, 29.  
 Abu Musa, minerals, **76**, 67.  
 Aden, sheep from, **78**, 51.  
 Administration, Bahrein, **76**, 48; French India, **77**, 15, 18-9; French Indo-China, **78**, 25-8, 60-1; Kwang-chow-wan, **78**, 27; Macao, **81**, 9, 10-1, 12; Oman, **76**, 40, 72; Persian coast, **76**, 74; Persian Makran, **76**, 63, 74-5; Portuguese India, **79**, 18-9, 20-3; Portuguese Timor, **80**, 10; South Arabistan, **76**, 73.  
 Africa, **79**, 31; carrying off of slaves from, forbidden, **76**, 79; trade, **76**, 32, **79**, 33.  
 Africans, Portuguese India, **79**, 9, 32.  
 Agricultural implements, manufacture, **79**, 42.  
 Agriculture, Arabistan, **76**, 74; French India, **77**, 29-33; French Indo-China, **78**, 49-53; Head of Persian Gulf, **76**, 33-4; Kaikal, **77**, 6; Mahé, **77**, 9; Persian littoral, **76**, 36; Portuguese India, **79**, 33-9; Portuguese Timor, **80**, 15-7, 25.  
 Aguada, **79**, 4.  
 Aguada Bay, **79**, 30; shipping, **79**, 6.  
 Aguada Head, **79**, 30.  
 Ahmed bin Said (Sultan bin Ahmed), Persians driven out of Muscat by, **76**, 40.  
 Ahram river, **76**, 23.  
 Ahwaz, **76**, 3, 12, 14, 55; rapids near, **76**, 16; sandstone hills, **76**, 16.  
 Ahwaz district, hills, **76**, 12; tribes, **76**, 34.  
 Aipelo, education, **80**, 10.  
 Ajman, Sheikh of, independence of, **76**, 43.  
 Ajman tribe, Arabian coastal region, **76**, 73; Persian littoral, **76**, 34.  
 Al Ali tribe, Persian littoral, **76**, 34.  
 Al Bu Said dynasty, founded by Ahmed bin Said, **76**, 40.  
 Alas, agriculture, **80**, 17; schools, **80**, 10.  
 Albergaria, Lopo Soares d', fleet sent by, to Canton river, 1517, **81**, 7-8.  
 Albuquerque, conquest of Goa, 1510, **79**, 13, 14; conquest of Malacca, 1511, **81**, 7; and Portuguese colonisation, **81**, 4.  
 Alcohol, **80**, 19; import, **80**, 22; trade, **78**, 61.  
 Aldona, **79**, 26.  
 Aleppo, trade, **76**, 52.  
 Almonds, **76**, 19; oil from, **77**, 30.  
 Along Bay, **78**, 3, 45.  
 Alorna, fort, **79**, 26.  
 Alvar, Count of, and disturbances in Goa, **79**, 14 note.  
 Amaral, Ferreira do, appointed Governor of Macao, 1846, **81**, 11.  
 Ambabari, wanted road, **79**, 25.  
 Ambergis, **80**, 6.  
 America, *see* United States of America.  
 American Arabian Mission, Persian Gulf region, **76**, 71.  
 American Standard Oil Co., at Karikal, **77**, 7.  
 Amiens, Peace of, 1802, **77**, 14 note.  
 Amomums and cardamoms, trade, **78**, 61, 63.  
 Amoy, cable communications, **78**, 47.  
 Amsterdam, trade, **80**, 14.  
 Anæmia, **78**, 7.  
 Andrade, Fernão Pires d', expedition to Canton river, 1517, **81**, 7-8.  
 Andrade, Simão d', appointed Ambassador of Canton, **81**, 8.  
 Angkor province, abandonment, 15th century, **78**, 13; ceded to Siam, 1867, **78**, 16; foundation, close of 9th century, **78**, 13.

- Anglo-Persian Oil Co., **76**, 14; activities in Arabistan, **76**, 56.
- Anglo-Persian Telegraph Convention, 1868, **76**, 63.
- Anjediv Island, **79**, 1; area, **79**, 5; British troops encamped at, **79**, 15; first Portuguese fort in India built at, **79**, 15.
- Annam, **78**, 1, 2, 14, 18, 19, 20, 52; administration, **78**, 25, 26, 27; agriculture, **78**, 49, 50, 54; area, **78**, 1; bridge building in, **78**, 32; Chinese domination in, **78**, 18, 24, displaced, and Annamese dynasty set up, 968, **78**, 14; climate, **78**, 6; coast, **78**, 4, 45; disturbances in, **78**, 29; education, **78**, 28; famine, **78**, 10; finance, **78**, 67, 69; fishing industry, **78**, 55; French interests and prestige, **78**, 18; French protectorate extended, 1884, **78**, 19; indemnity exacted from, 1862, **78**, 15; lines of communication, **78**, 30; manufactures, **78**, 58, 59; markets, **78**, 61; minerals, **78**, 56, 57, concessions, **78**, 55; mountains, **78**, 2, 3, 30, 31; population, **78**, 9; projected railway, **78**, 41; revolt against French conquests in Tongking, **78**, 20; rivers, **78**, 35; roads, **78**, 31; rulers of, **78**, 14, 17; salt pans, **78**, 59; steamer service, **78**, 47; stock rearing, **78**, 51-2; Tongking united to, 1801, **78**, 16; towns, **78**, 9; treaties with France, 1883, 1874, **78**, 17-8, 19; tribes in, **78**, 8.
- Annam, North, ports, shipping, **78**, 47.
- Annam, South, conquered 12th century, **78**, 13; known as principality of Cochin China, 1568, **78**, 14; Nguyen family in, power, **78**, 14.
- Annamese, civilisation, **78**, 14; description, **78**, 48; evacuation of Cambodia, 1846, **78**, 14; labour, **78**, 53, 56; manufactures by, **78**, 57-8; religion, **78**, 24; tribe, French Indo-China, **78**, 8.
- Annamite empire, **78**, 1.
- Annamite language, invention of Roman characters for, **78**, 28.
- Antilles, the, **77**, 50; immigration, **77**, 29.
- Antimony, **78**, 57; export, **78**, 57, 63.
- Ants, **78**, 51.
- Ao-mên, **81**, 5.
- Arab blood, Bahrein, **76**, 47; Persian littoral, **76**, 35; Persian Makran, **76**, 63.
- Arab littoral, treaty relations established with Great Britain, during European war, **76**, 75.
- Arab rulers, in Bushire, overthrow of powers, 1850, and installation of Persian Governor, **76**, 60; at Lingeh, 1898, **76**, 62; Persian Gulf region, **76**, 68, 71-2; Persian littoral, **76**, 58, agreements with Great Britain, **76**, 68, expulsion by Persian Government, **76**, 61.
- Arabia, **76**, 1, 3, 4, 11; caravan routes, **76**, 9; coast, **76**, 1, 2; drainage, **76**, 11; Eastern, designs of Mehemet Ali, Viceroy of Egypt, in, **76**, 49; expedition to, by Midhat Pasha, 1871, **76**, 50; foreign influences in, **76**, 76-7; influence of Wahabi Emir in, **76**, 48-9; internal affairs of, British refusal to interfere in, **76**, 51; plateau, **76**, 1; trade, **76**, 10, 21, 36; tribes, **76**, 34-5, piracy, **76**, 44; Turkish claim to sovereignty over, 1874, **76**, 46; Wahabi power in, **76**, 49; Western, Wahabi aggressions in, **76**, 49.
- Arabian coastal region, **76**, 6; description, **76**, 3, 4-11; treaty of peace by Chiefs of, on behalf of themselves, 1853, **76**, 80-1; tribal feeling in, **76**, 73.
- Arabian desert, **76**, 4, 12.
- Arabian Sea, **76**, 25, **79**, 3.
- Arabic, **76**, 30, 33, 36.
- Arabistan, **76**, 16, 17, 54; agriculture, **76**, 74; customs, management transferred to Imperial Persian Customs Dept., 1902, **76**, 56; language, **76**, 33; plains, **76**, 3, 12, 17; population, **76**, 33; Shiah sect in, **76**, 71; tribes, **76**, 32, 34, 55, tribal system, **76**, 73-4.
- Arabistan, South, **76**, 3; administration, **76**, 73; commercial development under British influence, **76**, 57; history, &c., **76**, 54-7; tribes, **76**, 74.
- Arabs, **76**, 62; Arabian coastal region, **76**, 29, 73; attempted attack on Bahrein, 1905, **76**, 48; Hasa, **76**, 50; Head of Persian Gulf, **76**, 32-3; Persian Gulf region, **76**, 39, 69, 72, 77, capture of Dutch fortified settlement on Kharak Island, 1766, **76**, 65, flag of friendly tribes, **76**, 78, treaty with Great Britain, 1820,

Arabs—*cont.*

- 76**, 78–80, vessels, register to be kept by, **76**, 78–9; Persian littoral, **76**, 35, 36, 58, 59, settlements, **76**, 34, 35; Portuguese Timor, **80**, 3; South Arabistan, **76**, 54; Trucial Oman, **76**, 29, 45; trade, **80**, 14.
- Arasalar river, **77**, 6, 7, 22, 26; construction of reservoir and hydraulic pumping station on, **77**, 34.
- Arcot, South, **77**, 1.
- Areca-nut (betel), cultivation, **77**, 30, 31, 32, **78**, 54; export, **79**, 35, 45, **81**, 21; import, **77**, 48, 49; palms, uses, **79**, 35; trade, **78**, 61.
- Ariancoupom, population, **77**, 5.
- Ariancoupom river, **77**, 3, 27.
- Armenians, Persian littoral, **76**, 35.
- Arms and ammunition, *see also* Guns and Gunpowder; import by Germany into Persian Gulf, **76**, 67; trade, **76**, 42; traffic, **76**, 65 note, forbidden, **78**, 66, friction caused by, **76**, 66, measures for suppression of, **76**, 64, 69, proclamation prohibiting, issued by Abdullah, Sheikh of El-Katr, **76**, 75, treaty signed by Trucial Sheikhs *re*, 1902, **76**, 45.
- Army and police, French Indo-China, **78**, 28.
- Arrack, customs duties on, **77**, 50.
- Arranganour, lignite, **77**, 36.
- As-Sabiya, Khor, **76**, 13.
- Asalu, **76**, 17.
- Asia, **78**, 1; mails, **80**, 11–2; trade, **79**, 33.
- Asiatic Steam Navigation Co., **77**, 28.
- Asiatics, Portuguese India, **79**, 9, 32.
- Assonora, road, **79**, 24.
- Assonora river, **79**, 26.
- Astagar, minerals, **79**, 41.
- Attopeu, **78**, 3; market, **78**, 62.
- Australia, **80**, 14; mails, **80**, 11–2; trade, **78**, 65.
- Austria-Hungary, shipping, **79**, 29; trade, **77**, 28–9, 49, **79**, 45.
- Ava, King of, rights over Mung Lem and Kiang Hung, **78**, 22.
- Avaz, tribes, **76**, 35.
- Awazim tribe, Arabian coastal region, **76**, 73.
- B.**
- Ba-nam, **78**, 32.
- Ba-trang, potteries, **78**, 58.

- Bac-ninh, market, **78**, 61.
- Bachmai, wireless station, **78**, 47.
- Baghdad, caliphate, **76**, 40; climate, **76**, 27, 28; navigation, **76**, 16; port, trade routes, **76**, 4; railway, **76**, 14, 52, scheme, **76**, 66–7; Russian consulate established at, 1881, **76**, 66; trade, **76**, 14, 16, 52; Turkish Governor of, protest against British interference in Bahrein and reply, **76**, 50.
- Baghdad Mohammedans, Persian littoral, **76**, 35.
- Baharina tribe, Arabian coastal region, **76**, 29.
- Bahour, lignite, **77**, 36; population, **77**, 5; projected railway, **77**, 24.
- Bahour enclave, **77**, 1.
- Bahrein, Gulf, **76**, 8; reefs and shoals, **76**, 8–9.
- Bahrein island (Manama), **76**, 2, 9, 10, 67, 76; American Arabian Mission established at, **76**, 71; Arab refugees from, **76**, 33 note; climate, **76**, 27, 28; conquest by Utubis, 1783, **76**, 45; description, **78**, 9; emigration, **76**, 35; harbour, **76**, 8, description, **76**, 9; history, &c., **76**, 47–8; pearl fisheries of, **76**, 62; population, **76**, 31; port, trade, **76**, 9; principality of, **76**, 9; under rule of Sheikh of Isa, **76**, 72; Shiah communities in, **76**, 71; trade, **76**, 36; tribes, **76**, 29, 34; villages, **76**, 30.
- Bahrein, Sheikhs of, **76**, 46, 47, 72, 80; agreement with Great Britain, 1879, *re* treaties with other Powers, **76**, 48; attack on El Katr, 1867, **76**, 46; claim to sovereignty over El-Katr disallowed by Government of India, **76**, 46; friction with Wahabis, **76**, 50; request to Government of Bombay for naval assistance, refused, **76**, 47; treaties with Great Britain, 1820, 1847, 1856, 1861, 1868, 1880, 1890, **76**, 43, 47–8, 68; tribute exacted from, by Wahabis, **76**, 46.
- Bahreinis in foreign countries, British consular protection for, **76**, 48.
- Bak-giang province, irrigation, **78**, 53.
- Bak-lieu, salt, **78**, 59.
- Bak-prea, **78**, 36.
- Bakhtiari country, **76**, 16; tribes, **76**, 57.
- Balasar, **77**, 2, 19.

- Balmanshir, channel, **76**, 14, 16; navigation, **76**, 16.
- Baluchi blood, Persian littoral, **76**, 35; Persian Makran, **76**, 63.
- Baluchi language, **76**, 36.
- Baluchis, Arabian coastal region, **76**, 29, 30; Head of Persian Gulf, **76**, 33.
- Baluchistan, **76**, 2, 3, 26, 40, 58; frontier, **76**, 17.
- Bamboo, **77**, 31, 33, **78**, 54, **79**, 35-6.
- Bampur, caravan route, **76**, 22; occupied by Governor-General of Kirman, 1844, **76**, 63; road, **76**, 24; seat of Government of Persian Makran at, **76**, 74; trade route, **76**, 21.
- Banco Nacional Ultramarino, **79**, 49, **80**, 25, **81**, 23.
- Banda island, **80**, 6.
- Bandar Abbas, **76**, 18, 22, 23, 24, 25, 40, 60, 65; climate, **76**, 27; customs seized by Nationalists, 1909, **76**, 62; formation into Gulf port charge, 1887, **76**, 61; Indian dispensary opened in, 1906, **76**, 29; language, **76**, 36; lease to Sultan of Muscat, 1794, **76**, 58, 63, lapse of, 1868, **76**, 61; population, **76**, 36; port, **76**, 20, description, **76**, 20-1; representatives of East India Co. at, 1623-4, **76**, 59; tribes, **76**, 35.
- Bandar Dilam, **76**, 3, 12, 17, 19, 24, 34; shipping facilities, **76**, 13.
- Bandar Jissa, French attempt to establish coaling station at, 1898, **76**, 65, leased to, 1898, but withdrawn, **76**, 42.
- Bangkok, **78**, 21; coastal service, **78**, 47; railways, **78**, 41; road, **78**, 44.
- Bank of Indo-China, **77**, 43, 53-4, **78**, 71.
- Bank of Madras, **77**, 54.
- Banking, French India, **77**, 53-4; French Indo-China, **78**, 71; Macao, **81**, 23; Portuguese India, **79**, 49; Portuguese Timor, **80**, 25.
- Banyan tribe, immigration, **79**, 32; Portuguese East Africa, **79**, 32; Portuguese India, **79**, 8.
- Bao-lak districts, livestock, **78**, 52.
- Baraimi oasis, **76**, 1 note; trade, **76**, 11.
- Barbosa, Duarte, on Timor island, **80**, 5.
- Bardez, agriculture, **79**, 35, 37; minerals, **79**, 41; obtained by Portugal, 1543, **79**, 13; population, **79**, 9; road, **79**, 24; salt works, **79**, 41.
- Bardez district, **79**, 1, 11.
- Baria, market, **78**, 62; population, **78**, 10; road, **78**, 31; salt, **78**, 59.
- Barique, schools, **80**, 10.
- Barra, **81**, 2.
- Barra Point, approach to, **81**, 16; harbour, trade, **81**, 17.
- Barros, Joao de, on Portuguese expedition to Timor and Solor islands, **80**, 6.
- Basidu, tract of land granted to British Government by Sultan of Muscat, **76**, 60.
- Basket work, import, **81**, 21.
- Baskets, **77**, 38.
- Basra, **76**, 3, 12, 13, 53, 54; American-Arabian Mission established at, **76**, 71; British factory at, establishment of staff at Kuwait, 1793, **76**, 52; British residency. removal to Failaka, 1821, **76**, 52; captured by Persians, 1776, **76**, 52; navigation, **76**, 15, 16; non-subjection to Turkey promised by Government of India, **76**, 75; population, **76**, 33; port, description, **76**, 14; rainfall, **76**, 27; trade, **76**, 4, 24, 54, 65; tribes, **76**, 32; Turkish vilayet of, **76**, 73.
- Bassak, ceded to France, 1904, **78**, 23; market, **78**, 62.
- Bassak Reach, **78**, 35.
- Bassak river, **78**, 36.
- Bassidore, **76**, 81.
- Bastak, caravan route, **76**, 21; tribes, **76**, 35.
- Batavia, shipping, **80**, 13.
- Batina coast, **76**, 8; climate, **76**, 27; description, **76**, 10; villages, **76**, 30.
- Batina plain, **76**, 7; agriculture, **76**, 7-8, 31-2; population, **76**, 31-2.
- Battambang province, **78**, 21; ceded to France, 1907, **78**, 23; ceded to Siam, 1867, **78**, 14, 16, troops withdrawn from, 1893, **78**, 21; market, **78**, 62; projected railway, **78**, 38, 41; road, **78**, 32, 44.
- Batugadé, anchorage, **80**, 13; military headquarters, **80**, 20.
- Baucau, **80**, 19; anchorage, **80**, 13; military headquarters, **80**, 20; petroleum, **80**, 19; road, **80**, 11; schools, **80**, 10.

- Bean oil, trade, **78**, 61.  
 Beans, **78**, 50, 51, **80**, 15.  
 Beduin tribes, Arabian coastal region, **76**, 31, 32; Oman, **76**, 6, 72; Persian Gulf region, wanderings, **76**, 72.  
 Beer, import, **77**, 49.  
 Bees, **80**, 17.  
 Bees-wax, export, **80**, 21.  
 Behbahan, **76**, 3, 17; administration, **76**, 74; population, **76**, 34; tribes, **76**, 33.  
 Behbahan Kuhgiluya province, tribes, **76**, 33.  
 Belgaum, **79**, 1.  
 Belgium, administration in Mohammara, **76**, 73; trade, **77**, 37, 47, 49.  
 Belonese tribe, Portuguese Timor, **80**, 3.  
 Ben-thuy, harbour, description, **78**, 45; match factory, **78**, 59; trade, **78**, 47.  
 Bengal, **77**, 2.  
 Bengal, Bay of, **77**, 27.  
 Bengali language, **77**, 10.  
 Bengali tribe, Chandernagor, **77**, 10.  
 Beni Khalid tribe, Sheiks of, headquarters at Hasa, **76**, 45; rule over Hasa, till 1795, **76**, 48.  
 Beni Saleh tribe, Arabistan, **76**, 74.  
 Beni Tamim tribe, Arabistan, **76**, 74.  
 Beni Turuf tribe, Arabistan, **76**, 74.  
 Beniaga island, **81**, 8.  
 Bennett, T. J., **76**, 38 note.  
 Benzoin, **78**, 54.  
 Besi river, **30**, 1.  
 Betel nuts, *see* Areca *above*.  
 Betul river, **79**, 26.  
 Beypore, road, **77**, 21.  
 Bhagwan river, **79**, 2, 4.  
 Biaban, coast, **76**, 19; tribes, **76**, 35.  
 Bicholim, post office, **79**, 28; projected railway, **79**, 28; road, **79**, 24.  
 Bicholim river, **79**, 26.  
 Bida, population, **76**, 31.  
 Bidau, education, **80**, 10.  
 Bien-hoa, **78**, 37; market, **78**, 62; population, **78**, 10.  
 Bien-hwa, laterite, **78**, 57.  
 Biku river, **80**, 1.  
 Bim-son, road, **78**, 31.  
 Binh-dinh, manufactures, **78**, 58; market, **78**, 61.  
 Birotue Mount, minerals, **80**, 19.  
 Birth rate, Pondicherry, **77**, 4, 5; Portuguese India, **79**, 9-10.  
 do Bispo Bay, **81**, 2.  
 "Black Flags," Chinese rebels, operations against French in Tongking, **78**, 16-7, 18, 20, 21.  
 Black Portuguese (Christians), siege laid to Lifau, 1769, **80**, 7.  
 Black river, **78**, 4-5, 34; steamer services, **78**, 34.  
 Black Town, area, **77**, 5.  
 Block tin, export, **78**, 63; import, **78**, 64.  
 Boa Vista, **81**, 3.  
 Boat building, **76**, 31, **79**, 34, **81**, 18.  
 Boils, **76**, 28.  
 Boletim da Sociedade de Geographia de Lisboa, **79**, 25.  
 Boloven Plateau, **78**, 3.  
 Bom Parto, fort, **81**, 2.  
 Bombay, **76**, 65, **79**, 1, 2, 29; British expeditions despatched from, to Persian Gulf, for suppression of piracy, **76**, 68; cession of, **79**, 15; Government, expedition against the Kawasim, 1805, **76**, 44, refusal of request made by Sheikh of Bahrein for naval assistance, **76**, 47, refusal of request for British protection to Sheikh of Bushire, 1828, **76**, 60; Presidency, Portuguese possessions in, **79**, 13; shipping, **77**, 27-8, **79**, 31; trade, **79**, 45.  
 Bombay, Baroda and Central India Railway, **79**, 2.  
 Bone powder, export, **77**, 45, 47.  
 Bong-mieu, gold, **78**, 57.  
 Bordeaux, **78**, 45.  
 Bottles, import, **78**, 64.  
 Bouet, General, capture of Son-tai, 1883, **78**, 19; operations in Tongking, **78**, 18.  
 Boulogne, **78**, 45.  
 Brahmans, Portuguese India, **79**, 16; Yanaon, castes, **77**, 8.  
 Brahmanism, **78**, 13, 24.  
 Brancavara, road, **79**, 25.  
 Brandy, import, **77**, 49.  
 Bras du Lac river, **78**, 5, 10.  
 Breweries, **78**, 58.  
 Brick work, **77**, 37, **78**, 59.  
 Bricks, import, **81**, 21; manufacture, **77**, 38, **78**, 58, **81**, 18; trade, **78**, 61.  
 British colonies, trade, **77**, 47, 49.  
 British Consular Report on French India, **77**, 27, 34.  
 British East Africa, trade, **79**, 47.  
 British East India Co., *see* East India Co.



British India, *see* India.

British India Steam Navigation Co., 77, 27-8, 28, 39.

Bronze coinage, 78, 71.

Bubian island, 76, 53 note; description, 76, 13-4; Turkish military post established at, 1902, 76, 53.

Bubo Naro, agriculture, 80, 17; military headquarters, 80, 20.

Buddhism, French Indo-China, 78, 13, 24, 25; Portuguese India, 79, 17.

Buffaloes, 78, 51; export, 80, 21; horns, 77, 38, 52, export, 80, 21; skins, export, 80, 21.

Building materials, import, 79, 46.

Burma, 78, 1, 2; upper, *see that title*.

Bushire, 76, 18, 20, 21, 22, 25, 29, 58; Arab rule overthrown in, 1850, and Persian Governor installed, 76, 60; British force landed at, 1909, to restore order, 76, 62; British Residency established, 1763, 76, 59, 60, 64, duties of Resident, 76, 68, resumption of duties, 1857, 76, 61; captured by British, 1856, 76, 60; climate, 76, 27; customs seized by Nationalists, 1909, 76, 62; formation into Gulf port charge, 1887, 76, 61; maritime plain, 76, 18; population, 76, 36; port, description, 76, 20; projected road, 78, 23; Sheikh of, fleet possessed by, 76, 58, friction with Persia, 76, 60, secret application for British protection, 1828, 76, 60, supplanted by Persian Governor, 1808, 76, 58-9; tribes, 76, 35.

Bustaneh, possible commercial port, 76, 21; sulphur, 76, 18.

Butter, import, 79, 38; trade, 78, 61.

Button factory, 78, 58.

### C.

Cabo Point, 79, 4, 30.

Cacilhas Bay, 81, 2.

Cacilhas, Mount, 81, 1.

Cadoli, road needed, 79, 25.

Cairo, British political representative at, 76, 49.

Caju-nuts, export, 79, 29, 30, 35, 44, 45, duty, 79, 45.

Calacaxigão, 79, 4.

Calana Pavori, *see* Damão Pen-quena.

Calcareous deposits, 78, 57.

Calcutta, 77, 2, 10, 12, 14, 27-8.

Calicut, 77, 2, 8; railway, 77, 24.

Calves, 78, 52.

Cambay, Gulf of, 79, 1, 2.

Cambodia, 78, 1, 5, 35, 36; administration, 78, 25, 26, 27-8; agriculture, 78, 6, 49, 50, 54; area, 78, 1; cattle, 78, 52; coast, 78, 4; conflicts in, 78, 13, 14; education, 78, 28-9; evacuated by Annamese, 1846, 78, 14; finance, 78, 67, 69; fishing industry, 78, 55; Khmer power in, decline, 78, 13; king of, *see* Norodom; lakes, agriculture, 78, 50, fishing, 78, 55; lines of communication, 78, 30; manufactures, 78, 58; markets, 78, 62; minerals, 78, 56, concessions, 78, 55; native road transport, 78, 32; population, 78, 9; Portuguese and Dutch in, 78, 13; power station, 78, 59; projected railway, 78, 38, 42; religion, 78, 24-5; roads, 78, 31, 31-2; saw mills, 78, 54, 59; slavery abolished, 1863, 78, 19; stock rearing, 78, 51; towns, 78, 10; treaty with France, 1863, 78, 16; tribes, 78, 8, French Indo-China, 78, 7.

Camels, 76, 32.

Camoens, Portuguese poet, 81, 24; grotto of, 81, 6.

Campos, João de, 80, 6.

Canacona Bay, 79, 4.

Canacona province, 79, 2, 3; forests, 79, 34; road, 79, 25.

Canal Principal, projected fall, to generate electric power, 78, 59.

Canals, French Indo-China, 78, 37; Pondicherry, 77, 22; Portuguese India, 79, 27; Yanaon, 77, 7.

Canning, Lord, settlement of dispute *re* dominions of Seyyid Said, Sultan of Muscat, 1861, 76, 41.

Cansarvale, road, 79, 24.

Canton, 78, 3, 81, 1, 10; Portuguese expelled from, 81, 8; projected railways, 81, 15; steamer service, 81, 17; trade, 81, 20, 21.

Canton river, 81, 1, 19, 24.

Cap St. Jacques, 78, 45; wireless station, 78, 47.

Cape of Good Hope, 77, 50.

Caravan routes, Arabian coastal region, 76, 9, 32; Head of Persian Gulf, 76, 22; Persian littoral, 76, 20, 21.

Cardamons and amomums, 78, 54.

Cardiff, coal, 77, 36.

Carts, manufacture, **79**, 42.  
 Carving, **78**, 48.  
 Castelbranco, Sr., on irrigation of Portuguese India, **79**, 39.  
 Castes, French India, **77**, 17-8; Portuguese India, **79**, 16-8.  
 Castio, D. João de, battle won by, in Diu island, 1546, **79**, 15.  
 Castle Rock, railway, **79**, 27; trade, **79**, 45.  
 Castor oil, **78**, 54; export, **77**, 46; plant, **77**, 31.  
 Cattle, **77**, 30, 32, **78**, 51-2, 52, **79**, 38, **80**, 17; export, **77**, 47, **78**, 52, 63; import, **79**, 38; raids, **76**, 74; trade, **78**, 61.  
 Cauveri river, **77**, 6, 26, 33.  
 Celebes, trade, **80**, 21-2.  
 Cement, **81**, 19; export, **78**, 63, **81**, 19, 21; manufacture, **78**, 57, **81**, 18; trade, **78**, 61.  
 Central Arabia, appointment of Turkish Vali of, and overthrow of, **76**, 49; power of Wahabism in, **76**, 48-9; tribes, **76**, 52.  
 Cerco, Porta do, **81**, 9.  
 Cereals, **76**, 18, **78**, 50, **79**, 35, 36-7.  
 Ceylon, oil industry, **77**, 38; shipping, **77**, 28; trade, **77**, 45, 50, competition, **77**, 40.  
 Chahbar, *see* Charbar.  
 Chakuta, Arab settlement, **76**, 35.  
 Chalakara, **77**, 2, 9.  
 Cham tribes, Annam and Tongking, **78**, 14; French Indo-China, **78**, 7.  
 Chambara, **77**, 2, 9.  
 Chamber of Commerce, established at Pondicherry, 1879, **77**, 39.  
 Champa, Hindu colony, **78**, 7.  
 Chandernagor, **77**, 1; administration, **77**, 18-9; Administrator of, convention with Government of India *re* salt, 1839, **77**, 16, 51; area, **77**, 2; boundaries rectified, 1853, **77**, 15; capture of, by Lord Clive and Admiral Watson, **77**, 13; Chef de Service, agreement of 1853 *re* boundaries, **77**, 16; climate, **77**, 9; description, **77**, 10; development, **77**, 13; destruction, **77**, 13; direct communication with sea forbidden, **77**, 26; education, **77**, 20; fortifications erected by French, about 1675-6, **77**, 12-3; French settlement acquired, 1688, **77**, 12, first French traders at, about 1673, **77**, 12; market, **77**, 39; opium conventions with Government of India, 1893 and

# Chandernagor—*cont.*

1905, **77**, 16; population, **77**, 1 note, 3; railway, **77**, 24; rebuilding of, **77**, 14; roads, **77**, 21; salt import, freedom of duty, **77**, 51; water supply, loan for improvement, **77**, 53.  
 Chantaboun, **78**, 21; coastal service, **78**, 47; French occupation, **78**, 21, 22, evacuation, 1904, **78**, 23.  
 Chao-dok, granite, **78**, 57; road, **78**, 32.  
 Chapora river, **79**, 26; projected canal, **79**, 27.  
 Charados, Portuguese India, **79**, 16, 17.  
 Charbar (Chahbar), **76**, 21; annexation by Oman, 1792, **76**, 40; British garrison established 1898, **76**, 64; climate, **76**, 27; harbour, **76**, 21; in possession of Sultan of Muscat till 1792, **76**, 63, captured by Persia, 1872, **76**, 40, 63; trade route, **76**, 21.  
 Chargeurs Réunis, shipping, **78**, 46, 47.  
 Charnier, Admiral, operations in Cochinchina, 1861, **78**, 15.  
 Chartered Bank of India, Australia and China, **78**, 71.  
 Cheese, import, **77**, 49; trade, **78**, 61.  
 Chemical manures, **78**, 53.  
 Chi-khom, port, **78**, 11.  
 Chilies, **79**, 37; export, **77**, 46.  
 China, **78**, 4, 18, **80**, 17, 20, **81**, 10; boundary, **78**, 1; commercial relations with Tongking, established 1887, **78**, 20; communication, **78**, 42, **80**, 14; compensation to Great Britain for breach of 1894 treaty, **78**, 23; conventions, with France, 1884, 1885, 1889, 1895, **78**, 19, 20, 22, with Great Britain, 1894, **78**, 22, 23; decline of power in Macao, and recognition of Portuguese rights, 1887, **81**, 11; domination in Annam, **78**, 18, 24, displaced, 968, **78**, 14; emigration, **78**, 7; erection of rampart across neck of Macao peninsula, 1573, **81**, 9; and French Indo-China, relations with, **78**, 29; friction with Portugal *re* Macao, **81**, 9-10, 24; imbroglio with France, 1884-5, **78**, 19-20; Kwang-chow-wan leased to France, in 1898, for period of 99 years, **78**, 11; negotiations with Portugal, 1554, **81**,

China—*cont.*

8-9; non-acceptance of treaty of, 1874, **78**, 18; Portuguese attempts to open up communications with, **81**, 7; prestige, regard to be paid to by France, by treaty of 1884, **78**, 19; projected railway extensions, **78**, 42; religion, **78**, 24; river traffic with French Indo-China, **78**, 33; road, **78**, 42; sheep from, **78**, 51; shipping, **78**, 46, **81**, 20; trade, **78**, 9, 43, 46, 64, 66, **79**, 47, **80**, 19, 20, **81**, 19, 21, route, **78**, 11; tribe from, **78**, 8, 14; war with Great Britain, **81**, 10.

China Sea, **78**, 1.

Chinchew, trade, **81**, 8.

Chinchinim, post office, **79**, 28.

Chinese, French Indo-China, **78**, 8, 10, 48-9, 72; Kwang-chow-wan, **78**, 11; labour, **78**, 56; Macao, **81**, 3, 4, 5, 6, 9, 10, 12, 18, 19, 23, 24, graves in, **81**, 15; Portuguese Timor, **80**, 3, trade, **80**, 14.

Chinese blood, **81**, 4.

Chinese language, **78**, 8, **81**, 12, 13.

Chinese Maritime Customs, **78**, 33.

Chinsura, **77**, 10.

Chlong, saw mills, **78**, 59.

Cho-bo, **78**, 34.

Chocli, road needed, **79**, 25.

Cholera, **76**, 28, **77**, 4, **78**, 7, **79**, 7, **81**, 3.

Cholon, factories, &c., **78**, 58-9; market, **78**, 62; population, **78**, 10; rice mills, **78**, 59.

Chounambar river, **77**, 3.

Christianity, Cochín China, **78**, 15; French India, **77**, 17-8; French Indo-China, **78**, 17; Portuguese India, **78**, 15, **79**, 11, 17; Portuguese Timor, **80**, 7, 10.

Chuy-chanver, power station, **78**, 59.

Cidade do Santo Nome de Deus de Macau, **81**, 5.

Cinchona, cultivation, **79**, 37.

Cinnamon, **77**, 31, **78**, 54; export, **78**, 63; trade, **78**, 61.

Citrons, **77**, 30.

City Line, **77**, 28.

Clan Line, **77**, 28.

Clarence Straits, **76**, 21, 24.

Clay, **78**, 57, **79**, 41.

Clear river, **78**, 4-5, 57; bridge, **78**, 39; steamer services, **78**, 34; system, **78**, 34.

Climate, Chandernagor, **77**, 10; French Indo-China, **78**, 6-7; Macao, **81**, 2-3; Mahé, **77**, 9; Persian Gulf, region, **76**, 26-8; Pondicherry and Karikal, **77**, 3-4, 6; Portuguese India, **79**, 5-6; Portuguese Timor, **80**, 2-3, Yanaon, **77**, 8.

Clive, Lord, capture of Chaader-nagor, **77**, 13; on Chandernagor, **77**, 13.

Cloth, import, **77**, 49, **79**, 30; trade, **78**, 61; weaving, **79**, 42.

Cloves, **77**, 31; trade, **80**, 6.

Coal, **77**, 36, **78**, 55-6, **78**, 45, **79**, 29, **81**, 17; export, **78**, 56, 63; import, **77**, 48, **79**, 29; trade, **78**, 61.

Cochin-China, **78**, 1, 18, 52; administration, **78**, 25, 26, 27; agriculture, **78**, 6, 49, 50, 51; annexation of another province to, 1883, **78**, 19; area, **78**, 1; arrival of Franco-Spanish, 1858, **78**, 15; bank, **78**, 71; Christian missionaries and converts, persecution of, **78**, 15; coast, **78**, 4; conquered, 12th century, **78**, 13; delta, **78**, 36-7; drainage, **78**, 53; education, **78**, 28; encroachments of Nguyen rulers in, **78**, 13-4; factories, **78**, 58, 58-9; finance, **78**, 67, 69; fishing industry, **78**, 55; forests, **78**, 53-4; labour, **78**, 49; lines of communication, **78**, 30; livestock, **78**, 52; manufactures, **78**, 58; markets, **78**, 62; mining concessions, **78**, 55; population, **78**, 8, 9; power stations, **78**, 59; principality of South Annam known as, 1568, **78**, 14; provinces ceded to France, 1862, **78**, 15, 16; railways, **78**, 37; rice mills, **78**, 59; rice supplies, **78**, 15; roads, **78**, 31; salt, **78**, 59; steamer service, **78**, 47; sugar refining, **78**, 59; towns, **78**, 9; treaty with France, 1787, **78**, 14-5; tribes in, **78**, 8; waterways, **78**, 37.

Coco-nuts, cultivation, **77**, 30, 31, 32, **80**, 16; export, **77**, 46, **79**, 29, 30, 44, 45, duty, **79**, 45; groves, **79**, 5; liquor distilled from, **77**, 50; oil, **77**, 38, **78**, 54, export, **77**, 40; palms, **77**, 33, **78**, 54, **79**, 4, **80**, 15, 25, uses, **79**, 34-5.

Cocoa, **80**, 25; cultivation, **77**, 33, **79**, 37; export, **80**, 16, 20, 21, duty, **78**, 65.

- Cocotine, export, **77**, 45, 47; manufacture, **77**, 38.
- Coffee, cultivation, **78**, 50, **79**, 37, **80**, 15, 15-6, 25; export, **77**, 46, **78**, 50-1, 63, **80**, 20, 21, 24, duty, **78**, 65; plantations, **78**, 51.
- Coimbatore, **77**, 17.
- Coir, **79**, 35; export, **79**, 30, 44, 45; making, **79**, 42.
- Colbert, J. B., Compagnie des Indes Orientales established by, 1664, **77**, 12.
- Colla Bay, **79**, 4.
- Collège, Calvé, **77**, 19-20.
- Collège, Colonial, **77**, 19, 20.
- Collège Duplex, **77**, 20.
- Collem, railway station, **79**, 27.
- Colombo, **77**, 27; shipping, **79**, 31; trade, **77**, 38, 44.
- Colowan island, **81**, 1, 2; administration, **81**, 12; band of pirates cleared away from, 1910, **81**, 11; education, **81**, 13; leper hospital, **81**, 3; occupied by Portugal, 1846, **81**, 11; population, **81**, 4, 5; villages, **81**, 6.
- Commerce, French India, **77**, 39; French Indo-China, **78**, 61-2; Macao, **81**, 19-21; Portuguese India, **79**, 43; Portuguese Timor, **80**, 20.
- Commercial treaties, French India, **77**, 50; French Indo-China, **78**, 66.
- Compagnie des chemins de fer de l'Indo-Chine et du Yun-nan, **78**, 40.
- Compagnie des Indes Orientales, established in India, 1664, **77**, 12.
- Companhia Commercial e Agricola de Timor, **80**, 16.
- Confucius, philosophy of, **78**, 24.
- Constantinople, **76**, 51; trade, **76**, 52.
- Constantinople Board of Health, and quarantine, **76**, 28.
- Coolies, export and import trade made illegal, 1874, **81**, 19; labour, supply, **78**, 57.
- Coote, Eyre, capture of Pondicherry, 1761, and destruction of, **77**, 13.
- Copper, **78**, 57, **80**, 19; coinage, **79**, 48, 49; work, manufacture, **79**, 42.
- Copra, **78**, 54, **79**, 34, 35; export, **78**, 63, **79**, 44, 45, **80**, 16, 21; trade, **78**, 61.
- Coral, **80**, 19.
- Corchonde, road needed, **79**, 25.
- Coriander, export, **77**, 46.
- Coringa, **77**, 2.
- Coringa river, **77**, 7, 26.
- Corn, **80**, 15.
- Coromandel, coast, **77**, 1; rice, **77**, 27.
- Cossimbazar (Kasimbazar), **77**, 2.
- Cota, road needed, **79**, 25.
- Cotchery, population, **77**, 6-7.
- Cotton, cultivation, **77**, 27, 31, 32, 33, **79**, 37, **80**, 16, 25, 51; development, **78**, 58; export, **77**, 47, **78**, 50, 63, **81**, 21; goods, **77**, 38, **79**, 42, export, **77**, 37, 43-4, 46-7, **81**, 21, import, **78**, 64, 65, **79**, 29, 46, **81**, 21; import, **77**, 48, **78**, 64, **81**, 21; sarongs, manufacture, **80**, 19; seed, export, **79**, 29; spinning, **77**, 36-7; trade, **78**, 61, **79**, 27; thread, export, **77**, 44, 47, **78**, 63, **81**, 21, import, **77**, 48, **78**, 64, **81**, 21.
- Coudouvar river, **77**, 3.
- Courbet, Admiral, operations in Tongking, **78**, 18.
- Courbet, Port, *see* Hon-gay Bay.
- Cows, **77**, 32, **78**, 52, **79**, 39.
- Creole girls, lace and embroidery made by, **77**, 38.
- Crockery, import, **77**, 49.
- Crude wax, **77**, 38.
- Cucumbers, **79**, 37.
- Cuddalore, **77**, 50; railway, **77**, 24, project, **77**, 24; road, **77**, 21; telegraphic system, **77**, 25.
- Cunao, **78**, 43; export, **78**, 63; roots, **78**, 54; trade, **78**, 61.
- Currency, French India, **77**, 53, **78**, 71; Macao, **81**, 22-3; Portuguese India, **79**, 48-9.
- Customs and tariffs, **77**, 50, **78**, 65, **79**, 48, **80**, 23-4.
- Cutlery, import, **77**, 49.
- Cyclones, Pondicherry, **77**, 4; Yanaon, **77**, 8.

## D.

- Dacca, **77**, 2.
- Dadra, **79**, 11; captured by Portugal, 1559, **79**, 15; enclave, **79**, 2.
- Dahana plain, **76**, 4, 11.
- Daman, *see* Damão.
- Daman Road station, **79**, 2.
- Damanganga (Sandalcalo) river, **79**, 2, 4, 5, 11, 30.
- Damão (Daman), **79**, 1, 4, 40; administration, **79**, 18-9; agriculture, **79**, 37; area, **79**, 2;

**Damão—cont.**

birth rate, **79**, 10; captured by Portugal, 1559, **79**, 15; climate, **79**, 6, 7; description, **79**, 2, 11; emigration, **79**, 32; forests, **79**, 4; hospitals, **79**, 7; manufactures, **79**, 42; minerals, **79**, 41; plague in, 1896–7, **79**, 7; population, **79**, 9, 12; ports, **79**, 28, 30; pottery, **79**, 42; river, **79**, 4; roads, **79**, 25; salt works, **79**, 41–2; teak, **79**, 34; trade, **79**, 44; tribes, **79**, 7–8, 12, religion, **79**, 17.

**Damão Grande** (Naer), pargana, **79**, 2.

**Damão Pequeno** (Calana Pavori), pargana, **79**, 2; road, **79**, 25.

**Damaun**, attempted invasion of Bahrein, from, 1859, **76**, 50.

**Dan-Sai** district, ceded to France, 1904, **78**, 23, ceded back to Siam, 1907, **78**, 23.

**Dang-rek** (Denrmong) range, **78**, 2.

**Dap-kau**, manufactures, **78**, 58; market, **78**, 61; paper mills, **78**, 58.

**Dapara**, wanted road, **79**, 25.

**d'Arcy**, Mr., concession for oil exploitation obtained from Persian Government, 1901, **76**, 57.

**Darлак** plateau, **78**, 3.

**Dashti** district, **76**, 25.

**Dashtistan**, Arab settlements, **76**, 35; coast, **76**, 19.

**Dates**, cultivation, **76**, 32, **77**, 30, **78**, 35; groves, **76**, 6, 8, 10, 12, 18, 33, **77**, 33; trade, **76**, 14.

**Dawasir** tribe, Persian littoral, **76**, 34.

**Deboy**, **76**, 80.

**Deccan**, the, **79**, 3.

**Deer** skins, export, **80**, 21.

**Deloncle**, Henri, on construction of harbour at Pondicherry, **77**, 27.

**Denmark**, trade, **77**, 29.

**Denrmong**, *see* **Dang-rek**.

**Dent**, Herbert, & Co., firm at Macao, **81**, 23.

**Depression**, **78**, 7.

**Deraya**, **76**, 49.

**Deres** tribe, Portuguese India, **79**, 8; tuberculosis among, **79**, 7.

**Develle**, memorandum signed by, 1893, *re* Siam, **78**, 22.

**Dhahira** district, **76**, 7, 8.

**Dharwar**, road, **79**, 24.

**Diabetes**, **77**, 4.

**Diarrhœa**, **79**, 7, **80**, 3.

**Dibai**, development, **76**, 11; population, **76**, 31; Sheikh of, **76**, 72,

**Dibai—cont.**

independence, **76**, 43; trade, **76**, 21; tribes, **76**, 29.

**Dili** (Dilly), agriculture, **80**, 15, 16; bank, **80**, 25; education, **80**, 10; population, **80**, 20; port, description, **80**, 2, 4, 12; Portuguese capital transferred to, **80**, 7; road, **80**, 11; shipping, **80**, 13, 14; telephonic communications, **80**, 12; trade, **80**, 21.

**Dilly**, **80**, 14.

**Dindonim**, road needed, **79**, 25.

**Distilleries**, **77**, 37, **78**, 58.

**Diu** island, **79**, 1, 2, 4; administration, **79**, 18–9; area, **79**, 2; Banyans in, **79**, 33; climate, **79**, 5, 6, 7; description, **79**, 11–2; emigration, **79**, 32; harbour, **79**, 5, 30; hospitals, **79**, 7; industries, **79**, 43; land, **79**, 41; minerals, **79**, 41; population, **79**, 9, 12; ports, **79**, 28; Portuguese conquest of, 1535, 1538, 1546, **79**, 15; road, **79**, 25; salt works, **79**, 42; trade, **79**, 28, 42, 44; tribes, **79**, 8; villages, **79**, 12.

**Diz** river, **76**, 17.

**Dizful**, **76**, 17.

**Doha** (El-Bidaa) port, description, **76**, 10; Turkish garrison established at, 1874, **76**, 46.

**Dom João** island, claimed by Portugal, **81**, 11.

**Dong-dang**, railway, **78**, 38.

**Dong-hoi**, railway, **78**, 38.

**Dong-trieu**, coalfield, **78**, 56.

**Donkeys**, **79**, 38.

**Donna Maria** II, fort, **81**, 2.

**Donna Paula**, road, **79**, 24.

**Donnai** river, **78**, 4, 5, 10, 37, 45.

**Doumer**, M., railway ambitions in French Indo-China, **78**, 37–8.

**Doumer**, Pont, **78**, 39.

**Dravidian** blood, **79**, 16.

**Dried** fish, export, **77**, 44, 47, **78**, 51, 55.

**Drugs**, import, **79**, 46.

**Dudsagor**, power, **79**, 43; viaduct, **79**, 27.

**Dufferin**, Lord, memorandum signed by, 1893, *re* Siam, **78**, 22.

**Dupleix**, J. F., administrator of Chandernagor and work of, **77**, 13; as Governor of Pondicherry and French possessions in India, **77**, 13; recalled to France, 1754, **77**, 13.

**Dupuis**, Jean, activities in Tongking, **78**, 16.

Dutch, capture of Pondicherry, 1693, **77**, 13; disappearance from Persian Gulf, 1766, **76**, 59; footing obtained in Cambodia, **78**, 13.  
 Dutch East Indies, shipping, **78**, 46; trade, **78**, 46, 63, 65, **80**, 21, 22.  
 Dutch Timor, **80**, 1; climate, **80**, 3.  
 Dutch war, 17th century, **79**, 14.  
 Dyes and dyeing, **77**, 37, **79**, 42, 43; export, **77**, 46; works, **78**, 59.  
 Dysentery, **77**, 4, **78**, 7, **79**, 7, **80**, 3.

## E.

Earthenware, export, **77**, 45.  
 East Africa, immigration, **79**, 32.  
 East India Co., agreement with Sultan of Muscat, 1789, *re* exclusion of French and Dutch from his territory, if at war with England, **76**, 40, confirmation, 1800, **76**, 40; interests in Persian Gulf, **76**, 65, position established, 1617, **76**, 58; at Macao, **81**, 10; permission given to, for agent to reside at Muscat, 1800, **78**, 40; and protection of Persian Gulf, agreement of 1622 *re*, **76**, 67; representatives settled at Bandar Abbas, 1623-4, **76**, 59; shipping lines, **79**, 31.  
 East Indian Railway, **77**, 24.  
 Eastern Archipelago, Portuguese supremacy in, **80**, 6.  
 Eastern and Australian Steamship Co., **80**, 14.  
 Eastern Extension Australasia and China Telegraph Co., **81**, 15-6, 23.  
 Eastern Telegraph Co., **78**, 62.  
 École Française d'Extrême Orient, **78**, 29.  
 Economic conditions, French India, survey, **77**, 54.  
 Education, French India, **77**, 19-20; French Indo-China, **78**, 28-9; Macao, **81**, 12-3; Persian Gulf region, scanty provision for, **76**, 71; Portuguese India, **79**, 20; Portuguese Timor, **80**, 10.  
 Eggs, export, **81**, 21; import, **81**, 21; trade, **78**, 61.  
 Egypt, **77**, 34; occupation of Hasa, 1818, **76**, 48, 49, evacuation, 1819, **76**, 49; occupation of Hasa, 1838, **76**, 49, withdrawal, 1840, owing to British opposition, **76**, 49.  
 Egyptians, aggression in Bahrein, **76**, 47.  
 Ejman, **76**, 80, 81.

El-Bidaa, *see* Doha.  
 El-Katif, **76**, 45, 49; attempted invasion of Bahrein from, 1859, **76**, 50; conquest by Wahabis, 1800, **76**, 49; population, **76**, 31; trade, **76**, 10.  
 El-Katr (Gattar) peninsula, **76**, 3, 4, 5, 8-10, 43, 76; attack on, by Sheikhs of Bahrein and Abu Dhabi, 1867, **76**, 46; claim of Sheikh of Bahrein over, disallowed by Government of India, **76**, 46; under control of Ibn Saud, Emir of Nejd, **76**, 72i history, &c., **76**, 45-7; population, **76**, 30; promontory of, **76**; 5; Sheikh of, agreement with Great Britain, 1868, **76**, 46; treaty with Great Britain *re* slave trade, **76**, 68; Turkish claim to sovereignty over, **76**, 46, renouncement by Convention, 1913, **76**, 47; Wahabi intrigues in, 19th century, **76**, 46.  
 El-obeid, **76**, 43, 45.  
 Electric light, power stations, **78**, 59.  
 Elephantiasis, **77**, 4.  
 Elphinstone inlet, harbour, **76**, 11.  
 Embarbagem, **79**, 43; forests, **79**, 34; minerals, **79**, 41.  
 Embroidery, manufacture, **77**, 38, **78**, 48; trade, **78**, 61.  
 Emigration, French India, **77**, 29; Head of Persian Gulf, **76**, 34; Portuguese India, **79**, 32.  
 Engineering materials, trade, **78**, 61.  
 English language, **79**, 20.  
 Ermera, agriculture, **80**, 16.  
 Erzerum, Treaty of, 1847, **76**, 55, ratification, 1848, **76**, 54.  
 Euphrates river, **76**, 2, 15.  
 Eurasians, French India, **77**, 2-3, 17.  
 Europe, communication, **76**, 3; financial crisis, 1907, **77**, 45-6; labour, **78**, 49; mails, **80**, 11-2; steamer service, **78**, 46, 67; trade, **77**, 45, **78**, 51, 55, **79**, 45, route, **78**, 11.  
 Europeans, Arabian coastal region, **76**, 28; Canton, **81**, 10; Chandernagor, **77**, 10; French India, **77**, 2-3, 17; French Indo-China, **78**, 7, 9, 32, 48, administration, **78**, 2, 8; Head of Persian Gulf, **76**, 32; Persian littoral, **76**, 35; Pondicherry, settlers, **77**, 4; Portuguese India, **79**, 5, 9, 10, 19, 32; Portuguese Timor, **80**, 3.

Exports and imports, French India, 77, 32, 42-8, 48-9, table, 77, 41-2; French Indo-China, 78, 50-1, 62-5; Macao, 81, 21; Portuguese India, 79, 29, 30, 44-7; Portuguese Timor, 80, 20-2.

## F.

Fahleia, 76, 80.  
 Fai-fo (Wang-nam), market, 78, 61; trade, 78, 9; tramways, 78, 40.  
 Failaka, removal of British residency to, 1821, 76, 52.  
 Fakan, khor, 76, 11.  
 Fao, cable connections, 76, 69; importance of, 76, 54; Kaza of, 76, 54; rainfall, 76, 27.  
 Fars province, 76, 2, 3, 60, 61, 74; agriculture, 76, 19; Prince of, 76, 59 note.  
 Fasht el-Farim Island, 76, 9.  
 Felahieh, 76, 55; Kaab focus at, 76, 74; Kaab Sheikhdum of, abolition, 76, 56; population, 76, 33.  
 Felahieh district, 76, 17; agricultural settlements, 76, 34; irrigated land, 76, 12; swamps, 76, 12.  
 Felahieh-Marid Canal, 76, 17.  
 Felicidade, Rua da, 81, 5.  
 Ferry, Jules, policy *re* Tongking, 78, 18.  
 Fetishism, Portuguese Timor, 80, 10.  
 Fever, 79, 7.  
 Fibre, 78, 54.  
 Finance, French India, 77, 52-3; French Indo-China, 78, 66-71; Macao, 81, 21-3; Portuguese India, 79, 47-9; Portuguese Timor, 80, 24-5.  
 Fireworks, export, 81, 21; manufacture, 81, 18.  
 Firuzabad, road, 76, 22.  
 Fish, 78, 51, 79, 43, export, 77, 44, 78, 55, 63, 79, 44, 45, 81, 19, 20, 21; export and import duties, 80, 23; import, 80, 22; industry, 79, 42; oils, 78, 55; salting industry, 79, 42; trade, 78, 32, 61, 81, 22.  
 Fisheries, French India, 77, 36; French Indo-China, 78, 55; Macao, 81, 19; Portuguese Timor, 80, 19.  
 Flint, trade, 78, 61.  
 Flores, ceded to Holland, 1854, 80, 7-8.  
 Flores Straits, 80, 6.

Flour, export and import duties, 80, 23; import, 78, 64, 65, 81, 21; trade, 78, 61.  
 Food, import, 77, 49.  
 Foreign interests and trade, French India, 77, 39-42; French Indo-China, 78, 62; Macao, 81, 19-21, 23.  
 Forests and forestry, 79, 40, 80, 17; Fars province, 76, 19; French India, 77, 34; French Indo-China, 78, 53-4, 60, 61; Portuguese India, 79, 33-4.  
 Formosa, Portuguese expelled from, by Dutch, 1622, 81, 10.  
 Forrest, Sir George, on irrigation in French India, 77, 34.  
 Fort Bayard, 78, 11.  
 Fournier, Captain, negotiations with Li Hung-Chang, 1884, 79, 19, 20.  
 Fowls, export, 81, 21.  
 France, acceptance of coaling station with Great Britain in Makalla Cove, 76, 42; acquainted with agreement of 1892, 76, 45; agreements and treaties, 1853, boundaries of Chandernagor, 77, 16, 1884, *re* opium, 77, 16, with Annam, 1874, 1883, 78, 17-8, 19, with Cambodia, 1863, 78, 16, with China, 1884, 1885, 1887, 1895, 78, 19, 20, 22, with Cochin China, 1787, 78, 14-5, with Great Britain, 1815, 1861, 1862, 1893, 1896, 76, 41-2, 65, 77, 16, 29, 50-1, 78, 21-2, 23, with Muscat, 1807, 1808, 1844, 76, 40-1, 65, 69, with Persia, 1807, 76, 59, with Siam, 1867, 1904, 1907, 78, 16, 23, with King Tuduc, 1862, 78, 15; appeal for assistance to, from Nguyen family of South Annam, 18th century, 78, 14; attack on, in Tongking, by "Black Flags," and withdrawal of, 78, 16-7; attempt to establish coaling station at Bandar Jissa, 1898, 76, 65; attempts to secure Kuria Muria islands, 76, 41; banking, 77, 54; capture of Son-tai, 1883, 78, 19; competition in Persian Gulf region, 76, 67-8; conquest of Tongking, history, 78, 18-9; evacuation of Chantaboun, 1904, 78, 23; flags to Muscat dhows, settlement of question, 1905, 76, 66; and French flagholders, reduction in number, Hague Tribunal *re*, 1905, 76, 43; imbroiglio with China, 1884-5, 78, 19-20; interests and

France—*cont.*

prestige, in Annam, **78**, 18, in Muscat, 1894, and appointment of Vice-Consul, **76**, 42, in Persian Gulf, **76**, 65–6, in Tongking, **78**, 16–7, 20–1; jurisdiction over small plots in India, **77**, 2; Kwang-chow-wan leased to, by China in 1898, for period of 99 years, **78**, 11; lease of coaling station at Bandar Jissa obtained from Sultan of Muscat, 1898, **76**, 42, cancelled by British ultimatum, **76**, 42; and licences to owners of dhows, Hague Tribunal *re*, 1905, **76**, 42–3; loans to French India for improvements, **77**, 52–3; missions to Persia between 1796 and 1809, **76**, 59; Navy, visits to Persian Gulf, 1895, **76**, 65; occupation in Indo-China, improvement as result of, **78**, 10, 29; Pondicherry restored to, 1697, **77**, 13; recognition of Seyyid Taimur, Sultan of Oman, **76**, 43; relations with Russia from 1891, **76**, 65; restoration of French possessions in India to, 1783, 1814, and 1815, **77**, 12–5, finally handed over, 1816 and 1817, **77**, 14; shipping, **78**, 46; Siamese relations and disputes with, **78**, 21–2; threatened raids on Macao, **81**, 10; trade, **76**, 65, **77**, 28, 46–7, 48–9, **78**, 43, 62, 63, 64, 65, **79**, 47.

Francepett, **77**, 2.

French, Chandernagor, **77**, 10; French Indo-China, road building and improvements, **78**, 30; Pondicherry, **77**, 5.

French Bank of Indo-China, **77**, 39.

French Candy, **77**, 43.

French Colonies, trade, **77**, 46–7, 49.

French East India Co., **76**, 12; financial distress, 1685, **77**, 13; formation in Persian Gulf region, 1664, **76**, 65; trade, **76**, 65.

French India, *see* **77**.

French Indo-China, *see* **78**.

French language, **78**, 8, **79**, 20.

French Laos, **78**, 2.

French Ministry of Foreign Affairs, **77**, 15.

French missionaries, French Indo-China, **78**, 25.

French traders, settlement at Chandernagor, about 1673, **77**, 12.

Fruits, cultivation, **77**, 30, 31, **78**, 51, **80**, 15; export, **79**, 29, 30, 44, 45, 51; import, **81**, 21; trade, **78**, 61; trees, **77**, 30, 33, 34–6.

Fu-kien, tribe from, **78**, 8.

Furniture, export and import duties, **80**, 23; manufacture, **78**, 58; trade, **78**, 61.

## G.

Gangem river, **79**, 26.

Ganges river, alluvial deposits, **77**, 10.

Garnier, F., **78**, 18; attack and capture of Hanoi, 1873, **78**, 16; exploration of Mekong river undertaken by, **78**, 16; killed by "Black Flags" in Tongking, **78**, 17, 18.

Gattar, *see* El-Katr.

Gaur tribe, Chandernagor, **77**, 10.

Gawnkars, Portuguese India, **79**, 21, 22.

General Treaty of Peace, 1820, **76**, 43, 44, 45, 47, 68.

Genouilly, Rigault de, operations in Cochin China, **78**, 15.

German East African Co., **79**, 31.

Germany, contract given to, by Persia for construction of two steamers, 1883, **76**, 62; interests and intrigues in Persian Gulf region, **76**, 66–7, 69; mining interests in French Indo-China, **78**, 72; and native concession for purchase of oxide of iron, question of, **76**, 67; navy, warships in Persian Gulf, 1899, **76**, 67; negotiations, with Great Britain, 1912–14, *re* affairs in Persian Gulf, **76**, 70; relations with Turkey, **76**, 67; shipping, **79**, 29; steam navigation in Persian Gulf, **76**, 68; trade, **76**, 67, **77**, 28, 47, 49, **79**, 47; war with, **76**, 75.

Ghafiri tribes, Oman, religion, **76**, 73.

Ghafiria, opposing factor to the Hinawie, **76**, 72.

Ghats, **79**, 3, 33; railway, **79**, 27.

Ghats, western (Sahyadri Mountains), **77**, 9, **79**, 1, 2.

Ghi, trade, **76**, 32.

Ghoorpuda, **77**, 2.

Gia-dinh, granite, **78**, 57; horse-breeding, **78**, 52.

Gia-lam, railway machine shops, **78**, 58.

Gia-long, member of Nguyen family, appeal to France for assistance, 18th century, **78**, 14; supremacy in Tongking, **78**, 16.



Gin, import, **77**, 49.  
 Gingee river, **77**, 1, 2, 3, 25, 33;  
 system, **77**, 3.  
 Ginger, **79**, 37.  
 Gingili, export, **77**, 46.  
 Glass, **77**, 38; import, **77**, 49;  
 trade, **78**, 61.  
 Goa Island (Tissuadi), **79**, 1, 4, 29,  
 30, 32, 33, 38, 40, **81**, 4; adminis-  
 tration, **79**, 18-9; agriculture,  
**79**, 33, 37; area, **79**, 1; captured  
 from Hindus by Mohammedans,  
 1479, **79**, 14; climate, **79**, 5-6, 6;  
 coast, **79**, 2-4, 4; conquered by  
 Albuquerque, 1510, **79**, 13, 14;  
 control of Governor-General over  
 Macao removed, **81**, 10-1; cur-  
 rency, **79**, 48; emigration, **79**, 46;  
 history, **79**, 13-5; hospitals, **79**,  
 7; language in, **79**, 8; minerals,  
**79**, 41; native races, **79**, 7-8;  
 population, **79**, 9, decrease, **79**,  
 14-5; ports, **79**, 24, 28-9;  
 Portuguese administration, **79**,  
 13; property, **79**, 41; railway,  
**79**, 27; rivers, **79**, 24, 26; roads,  
**79**, 24, 24-5; sanitary conditions,  
**79**, 7; shipping, **79**, 31; tanga  
 shares, **79**, 21; teak, **79**, 34;  
 trade, **79**, 3, 42; villages, **79**, 12.  
 Goanese, labour, **79**, 31-2, 38; Per-  
 sian littoral, **78**, 35.  
 Goats, **77**, 32, 38.  
 Godavari district, **77**, 7.  
 Godavari river, **77**, 2, 7, 8, 26.  
 Gogola, **79**, 2, 28, 30; harbour, pro-  
 jected road, **79**, 25.  
 Gold, **78**, 57, **80**, 19; coinage, **79**,  
 48, 49.  
 Grain, cultivation, **77**, 32, 34;  
 export, freedom from customs  
 duty, **77**, 50; import, **77**, 48, 49,  
**79**, 29, 46; trade, **78**, 14.  
 Grande Aldee, population, **77**, 6-7.  
 Granite, **78**, 57.  
 Great Britain, action against pirates,  
 1819, and result, **78**, 44; and  
 activities of Wahabis in Arabia,  
 measures taken against, **78**, 49-  
 50; agreements and treaties,  
 1853, *re* boundaries of Chander-  
 nagor, **77**, 16, 1872, *re* boundary  
 between Persia and Ketah, **78**,  
 63, 1884, *re* opium, **77**, 16,  
 with Arab Sates of Persian lit-  
 toral, **78**, 68, with Arab tribes of  
 Persian Gulf, 1820, **78**, 78-80,  
 with Bahrein Sheiks, 1820, 1847,  
 1856, 1861, 1868, 1879, 1880,  
 1890, **78**, 47-8, 48, 68, with China,  
 1894, **78**, 22, 23, with El-Katr,

# Great Britain—*cont.*

Sheikh of, 1868, 1916, **78**, 46, 68,  
 75, with France, 1815, 1861, 1862,  
 1893, 1896, **78**, 41-2, 65, **77**, 16, 29,  
 50-1, **78**, 21-2, 23, with Hasa, *re*  
 slave trade, **78**, 68, with Ibn Saud,  
 1915-6, **78**, 76, with Koweit, *re*  
 slave trade, **78**, 68, with Mubarak,  
 Sheikh of Koweit, 1899, **78**, 52,  
 with Muscat, 1822, 1839, 1891,  
**78**, 40, 41, 42, 68, with Persia,  
 1801, 1809, 1812, 1814, 1841,  
 1851, 1857, **78**, 59, 60, 61, with  
 Russia, 1907, **78**, 66, with Tru-  
 cial Sheikhs, *re* slave trade,  
**78**, 68, 1892, **78**, 44-5, with  
 Turkey, 1913, **78**, 47, 53, with  
 Sultan of Zanzibar, *re* payment  
 of annual subsidy to Muscat,  
 1873, **78**, 41; and alliance with  
 Russia, **78**, 59; assurance issued  
 to Persian Gulf chiefs, 1914, *re*  
 protection of their liberty and  
 religion, **78**, 75; attempts to  
 suppress traffic in arms, **78**, 69;  
 boundaries of Muscat, **78**, 39-40;  
 capture and destruction of Zabara  
 by naval force, 1905, **78**, 48;  
 capture of Mauritius, 1810, effect  
 on French prestige in East  
 African and Arabian waters, **78**,  
 41; compensation granted to,  
 for breach of 1894 treaty, **78**, 23;  
 concessions to Sheikhs of Mo-  
 hammera and Koweit, on account  
 of loyalty during European war,  
**78**, 75; cruisers in Persian Gulf,  
 authorised to prevent or punish  
 disturbances, 1881, **78**, 50, block-  
 ade maintained from 1910-14,  
**78**, 64; expeditions, against Kaal  
 tribes in Arabistan, **78**, 55,  
 against the Kawasim, 1809, **78**,  
 59, to Macao, 1802, 1808, **81**, 10,  
 to Persian Gulf, **78**, 60-1; fleet  
 in Persian Gulf, 1806-8, **78**, 44;  
 force landed at Bushire, 1909, to  
 restore order, **78**, 62; French  
 possessions in India occupied by,  
 1778, 1793, and 1803, **77**, 14;  
 grant of tract of land at Basidu  
 to, by Sultan of Muscat, **78**, 60;  
 and independence of the Kawasim,  
**78**, 44; interest and influence, in  
 Anglo-Persian Oil Co., **78**, 56, in  
 Arabian coastal region, **78**, 28,  
 in Arabistan, **78**, 55-8, in Bah-  
 rein, **78**, 47, 48, *re* dispute  
 between France and Siam, **78**,  
 22-3, in El-Katr, 1868, **78**, 46,  
 in Hasa, **78**, 49, 50, in Henjam

Great Britain—*cont.*

island, **76**, 25, in Koweit, **76**, 52-3, in Mesopotamia, **76**, 67, in Mohammera, on behalf of the Sheikh, **76**, 56-7, in Muscat, **76**, 41, in Persian Gulf region, **76**, 38-9, 67-70, 76-7, in Persian Makran, **76**, 64, garrisons formed, 1898, **76**, 64, in Trucial Oman, **76**, 44-5, 46, control of administration, **76**, 72; Kuria Muria islands ceded to, by Sultan of Muscat, 1854, **76**, 41; naval blockade of Makran coast, **76**, 69; negotiations, with France, *re* Siam, 1893, **78**, 22, with Germany, 1912-14, *re* affairs in Persian Gulf, **76**, 70, with Turkey, 1912-14, *re* affairs in Persian Gulf, **76**, 70; occupation, of Hongkong, 1842, **81**, 10, ordinance passed *re* Macao, 1844, **81**, 10, of Kharak and Kais, **97**, 24, of Mohammera, 1856-7, **76**, 56, in Persia, **76**, 3; offer of site for coaling station to France, at Makalla cove, and acceptance, **76**, 42; police work, &c., in Persian Gulf, **76**, 58, 62, 68-9; and protection of telegraph lines, Persian Makran, **76**, 63; protest to, by Persia, against occupation in Kishm Island, **76**, 59 and note; protests to Turkey at Constantinople, against Turkish assistance to Ibn Rashid, **76**, 50-1, against construction of fortifications in Fao, **76**, 54; recognition of Seyyid Taimur, Sultan of Oman, **76**, 43; refusal to interfere in internal affairs of Arabia, **76**, 51; refusal to sanction scheme of Persian Navy in the Gulf, **76**, 62; reply to Turkish protest against British interference in Bahrein, **76**, 50; sanitation of Persian coast entrusted to, by Persian Government, 1897, **76**, 28; and Shatt el-Arab river, survey, &c., **76**, 54; shipping, **76**, 46, **79**, 29, **80**, 12, 13; submarine cables, Persian Gulf region, **76**, 54; and suppression of piracy in Persian Gulf, **76**, 45-6; treaty relationships established between rulers of Arab littoral and, during European war, **76**, 75; trade, **76**, 65, 70, **77**, 28, 29, 37, 47, 48-9, **78**, 64, 65, **79**, 29, 45, 47, **80**, 22, routes, **76**, 4; troops in Persia, withdrawal, 1857, **76**, 61; and Turkish claims to sovereignty

Great Britain—*cont.*

over El-Katr, **76**, 46; ultimatum to Sultan of Muscat *re* lease of coaling station to France, 1898, **76**, 42; undertaking of yearly payments to chiefs of Persian Makran for protection of telegraph line, 1869, **76**, 63; war, with China, **81**, 10, with Persia, 1856, **76**, 60-1.

Great (Tonle-sap) Lake, **78**, 5, 7, 21; population, **78**, 9, 10.

Great Lake river, **78**, 36.

Greece, trade, **77**, 29.

Green island, **81**, 3; cement and brick factory, **81**, 18-9; typhoon harbour dredged, **81**, 16.

Green Island Cement Co., **81**, 19, 23.

Grey, Sir E., **76**, 66; on British policy in Persian Gulf, 1907, **76**, 69.

Grosgurin, Inspector, death, 1893, **78**, 21.

Ground nuts, **77**, 30-1, 32, **78**, 50; export, **77**, 42-3, 46-7; industry, oil, **77**, 30, export, **77**, 45; trade, **77**, 7, 28, 41.

Grubs and caterpillars, **78**, 51.

Guadar, **76**, 63.

Guadar enclave, dependency of Oman since 1792, **76**, 40.

Guattar, *see* Gwattar.

Guavas, **77**, 30.

Guia, Fort da, **81**, 1, 16.

Guinees (dyed fabrics), **77**, 38; export, **77**, 4.

Gujarat caste, **79**, 33.

Gujarati language, **79**, 8.

Gujarati tribe, Portuguese India, **79**, 8, 12; schools, **79**, 20.

Gum copal, trade, **76**, 65 note.

Gum and stick-lac, export, **78**, 63.

Gums, **77**, 31, **78**, 50, 54; export, **79**, 30.

Guns and gunpowder, *see also* Arms and Ammunition; export and import duties, **80**, 23; import, **81**, 21; trade, **81**, 19; traffic forbidden, **78**, 66.

Gwattar (Guattar), **76**, 1, 3, 17, 19, 63; bay, description, **76**, 22; caravan route, **76**, 22; road, **76**, 24; trade route, **76**, 21.

Gypsum, **76**, 18.

## H.

Ha-tien, coastal service, **78**, 47; road, **78**, 32.

Haffar, channel, **76**, 14, 16.

- Hague Tribunal, **80**, 9; arbitration *re* French licences to owners of dhows, **1905**, **76**, 42-3.
- Hai-duong, manufactures, **78**, 58; market, **78**, 61; minerals, **78**, 55, 56.
- Hai-fong, **78**, 27; banks, **78**, 62, 71; cable connections, **78**, 47; projection, **78**, 47; Chamber of Commerce, **78**, 62; coastal service, **78**, 47; distillery products, **78**, 58; factories, **78**, 58; French garrison, **78**, 18; lines of communication, **78**, 30; manufactures, **78**, 58; market, **78**, 61; observatory, **78**, 47; port, **78**, 4, 9, description, **78**, 44-5; power stations, **78**, 59; railways, **78**, 38, 43, project, **78**, 38; river traffic, **78**, 33-4, 34; shipping, **78**, 46, 64; steamer service, **78**, 46; trade, **78**, 44, 47.
- Hai-fong-Yun-nam-fu Railway, **78**, 39, 64; capital for construction, **78**, 40; finance, **78**, 40; tariffs, **78**, 41.
- Hainan Island, **78**, 11.
- Hajar, **76**, 7.
- Hamburg, trade, **80**, 14.
- Hamburg-America line, steamer service between Europe and Persian Gulf established, **1906**, **76**, 67.
- Hamed bin Rashed, Chief of Ejman, **78**, 80, 81.
- Hanoi, **78**, 4, 16, 20, 25, 27, 33, 47; attack on, and capture by Garnier, **1873**, **78**, 16; banks, **78**, 62, 71; besieged, by Black Flags, **78**, 18, by French, **1882**, **78**, 18; bridge, **78**, 39; Chamber of Commerce, **78**, 62; distillery products, **78**, 58; factories, **78**, 58; growth, **78**, 10; lines of communication from, **78**, 30; manufactures, **78**, 58; market, **78**, 61; population, **78**, 9; power stations, **78**, 59; railways, **78**, 38, projected junction, **78**, 38; river traffic, **78**, 33; roads, **78**, 31; tramways, **78**, 39; trade, **78**, 44; viaduct, **78**, 39.
- Hanoi-nam-kwan Railway, **78**, 42; finance, **78**, 40; projected extension, **78**, 43; tariffs, **78**, 41.
- Hanoi-Saigon Railway, **78**, 38, 39.
- Hanoi-vinh Railway, finance, **78**, 40; tariffs, **78**, 41.
- Hanoi-Yun-nan-fu Railway, **78**, 33.
- Hardinge, Sir A., letter to Sheikh of Mohammara *re* protection, **1902**, **76**, 57 note.
- Hardware, import, **79**, 30.
- Harmand, Commissary - General, policy *re* Tongking, **78**, 18; treaty of **1883**, alterations to, **1884**, **78**, 19.
- Hart, Sir Robert, and treaty of **1885**, **78**, 19.
- Hasa oasis, **76**, 5, 9; agriculture, **76**, 31; description, **76**, 6; population, **76**, 31; tribes, **76**, 29; villages, **76**, 30; water supply, **76**, 11.
- Hasa province, **76**, 2, 3, 4, 5, 6, 53, 76; headquarters of Beni Khalid Sheikhs, **76**, 45; history, &c., **76**, 48-51; population, **76**, 30; Shiah communities in, **76**, 71; treaty with Great Britain, *re* slave trade, **76**, 68; tribes in, **76**, 73; Turkish expedition to, **1871**, under Midhat Pasha, **76**, 44, effect on situation in El-Katr, **76**, 46; under rule of Ibn Saud, Emir of Nejd, **76**, 71; water-courses, **76**, 11.
- Hassun bin Ali, Sheikh of Zyah, **76**, 80.
- Hassun bin Rahmah, Sheikh of Hatt and Fahleia, **76**, 80.
- Hats, manufacture, **78**, 54.
- Hatt, **76**, 80.
- Hatu-Lia, military headquarters, **80**, 20.
- Hawiza district, **76**, 17; irrigated land, **76**, 12; population, **76**, 33; swamps, **76**, 12; tribes, **76**, 34.
- Henjam island, description, **76**, 25.
- Herat, Persian operations against, **1837-8**, **76**, 60; trade route, **76**, 21.
- Heungshan island, **81**, 1, 9.
- Hides and skins, **77**, 32, **78**, 43; export, **77**, 45-6, 47, **78**, 63; trade, **78**, 61.
- Hinawie, opposing factor to the Ghafria, **76**, 72.
- Hindian, navigation to, **76**, 17; population, **76**, 33; tribes, **76**, 34.
- Hindian district, **76**, 12; tribes, **76**, 33.
- Hindian river, **76**, 12; irrigation, **76**, 13; system, **76**, 17.
- Hindu civilization, **78**, 14.
- Hindu girls, lace and embroidery made by, **77**, 38.
- Hinduism, French India, **77**, 17; French Indo-China, **78**, 7; Persian littoral, **76**, 35; Portuguese India, **79**, 8, 11, 14, 17.
- Hindustani, **76**, 30, **77**, 10.

Hofuf, **76**, 6; caravan routes to, **76**, 9, 10; development, **76**, 30; population, **76**, 31.

Holland, agreements with Portugal, 1854, 1859, 1893, **80**, 7-8, 8, 8-9; interests &c., in Archipelago, **80**, 6-7, in Persian Gulf and region, **76**, 64-5, 67-8; in possession of portion of Timor island, **80**, 5; shipping, **79**, 29, **80**, 12, 13; trade, **77**, 29, 47; unsuccessful attack on Macao, 1622, **81**, 10.

Hollands, import, **77**, 49.

Hon-gay, cement manufacture, **76**, 58; coalfields, **78**, 45, 55-6, 58; shipping, **78**, 46; trade, **78**, 47.

Hon-gay bay (Port Courbet), **78**, 4; coal wharves, **78**, 56; description, **78**, 45; harbour, **78**, 45.

Honey, export, **80**, 17.

Hongkong, **81**, 4, 19, 23; British occupation, 1842, **81**, 10, ordinance passed, 1844, *re* Macao, **81**, 10; cable connections, **78**, 47; climate, **81**, 3; fishers, migration to Macao, **81**, 19; house rent, **81**, 18; shipping, **81**, 17, 21; trade, **78**, 46, 55, 63, 65, **81**, 7, 19, 20-2.

Hongkong, Canton and Macao Steamship Co., **81**, 17.

Hongkong and Shanghai Banking Corporation, **78**, 71.

Hooghly river, **77**, 2, 10, 12, 22; system, **77**, 10.

Hormuz island, **76**, 25; leased to Sultan of Muscat, 1794, **76**, 58; occupied by Portugal, 1508, **76**, 64; Portuguese expelled from, 1622, **76**, 58, 67; under power of Sultan of Muscat, **76**, 40; tribes, **76**, 35.

Hormuz, Straits of, **76**, 1, 2, 8, 19, 20, 22, 24, 25, 34.

Horses, **77**, 32, **78**, 32, 51, 52, **79**, 38; export, **80**, 21.

Houdong, treaty signed at, 1863, between France and Cambodia, **78**, 16.

Hu-nan, tribe from, **78**, 8.

Huê, **78**, 18, 21; Court of, negotiations with France, **78**, 17; growth, **78**, 10; ice factory and perfumery, **78**, 59; market, **78**, 61; occupied by France, 1885, **78**, 20; population, **78**, 9; stormed by French, **78**, 19; treaty signed at, 1884, between France and China, **78**, 19; viaducts, **78**, 39.

Hull, **77**, 47.

Hung-yen, market, **78**, 61.

## I.

Ibadhi, sect of Islam, **76**, 72-3; Persian Gulf region, **76**, 71.

Ibadhi Sheikh, rival Imam set up by, in Oman, **76**, 72.

Ibn Rashid, Emir of the Jebel Shammar, warfare with Emir of Nejd, **76**, 50; Turkish assistance given to, **76**, 51.

Ibn Saud, Emir of Nejd, acceptance of title of Vali of Nejd and Hasa, 1914, **76**, 71-2; alliance with Sheikh of Koweit, **76**, 50; friendly relations with Great Britain, **76**, 72, 75-6, overtures to, **76**, 50, 51, treaty with, 1915-6, **76**, 76; ruler, over El-Katr, **76**, 72, over Hasa, **76**, 71; warfare with Emir of the Jebel Shammar, **76**, 50.

Ibrahim Pasha, leader of Egyptian expedition against Hasa, 1818, **76**, 49.

Ice factories, **78**, 58, 59.

Idan tribe, Arabian coastal region, **76**, 73.

Ijil, salt deposits, **106**, 2.

Ile des Cocotiers, **77**, 27.

Ile des Deux Song, calcareous deposits, **78**, 57.

Ilhas islands, **79**, 1; agriculture, **79**, 35, 37; population, **79**, 9; salt, works, **79**, 41.

Ilot de l'Observatoire, tramways, **78**, 40.

Immigration, Arabian coastal region, **76**, 32; French Indo-China, **78**, 8, 48-9; Persian littoral, **76**, 35; Portuguese India, **79**, 32-3.

Imperial Persian Customs, **76**, 28; administration, inclusion of Gulf districts in sphere of operations of, 1900, **76**, 62; and control of customs of Arabistan, 1902, **76**, 56.

Incense, export, **81**, 21; import, **81**, 21.

India, **76**, 76, **77**, 7, 9, **79**, 1; acquisition of settlements in, by France, history of, **77**, 12-5; agriculture, **79**, 36; army, and rebellious tribes in Muscat, **76**, 43; bamboo trees, **79**, 36; cable connections, **76**, 54, **79**, 28, 31; convention with Administrator of Chandernagor, *re* salt, 1839, **77**, 16, 51; currency, **79**, 48; deportation of pretenders to, from Muscat, and effect of intervention, **76**, 41; emigration, **78**, 7; employment

India—*cont.*

of Goanese as servants, **79**, 31-2; exchange rates, **79**, 49; Government of, and affairs in Koweit, **76**, 53, and claim of Sheikh of Bahrein to sovereignty over El-Katr, **76**, 46, concession made to Sheikhs of Koweit and Moham-mera, in recognition of loyalty to England, **76**, 75, convention and agreements, 1884, *re* opium, **77**, 16, 1853, *re* boundaries of Chandernagor, **77**, 16, with Chandernagor, 1893 and 1905, **77**, 16, and customs duties, **77**, 50, and enforcing of slave trade treaties, **76**, 68, instructions to Wahabis in Arabia, **76**, 49-50, maintenance of submarine cables, Persian Gulf, **76**, 68-9, payment of subsidy to Muscat, on behalf of Zanzibar, **76**, 41, restriction of coinage, **77**, 53, and telegraphic service in French India, **77**, 25; ground-nuts, **77**, 43; immigration, **79**, 32, 38, 39, 46; languages from, **78**, 13; monsoons, **77**, 4; ship-ping, **77**, 28; trade, **76**, 32, 52, 54, **77**, 42, 45, 50, **78**, 64, 65, **79**, 38, 45, 46, routes, **76**, 3; Viceroy of, visit to Koweit, 1903, **76**, 53. Indian Marine, in Persian Gulf, **76**, 60. Indian Medical Service, **76**, 29. Indian Ocean, **76**, 1, **80**, 6. Indians, **76**, 62; Arabian coastal region, **76**, 30; French India, **77**, 2-3; Head of Persian Gulf, **76**, 32; Persian littoral, **76**, 35. Indigo, **77**, 37, 38; cultivation, **77**, 31, 32, **78**, 50; export, **77**, 37, 45. Indo-China, **81**, 3, *see also* **78** Con-tents; shipping, **77**, 28; trade, **81**, 21. Indo-European Telegraph Depart-ment, **76**, 22-3; activities in Persian Makran, 1861, **76**, 63. Industry, French India, survey, **77**, 54; French Indo-China, **78**, 48. Irak, **76**, 1, 4, 5; climate, **76**, 27; commerce, **76**, 28; friction in, **76**, 56; frontier, **76**, 34; history, &c., **76**, 53-4; Jews in towns of, **76**, 71; plain, **76**, 12; plateau, **76**, 1; population, **76**, 33; Portuguese commercial interests in, **76**, 64; Roman Catholic mission stations at, **76**, 71; Shiah sect in, **76**, 71. Irak districts, **76**, 73. Irani blood, Persian littoral, **76**, 35. Iranian plateau, **76**, 3, 19.

Iron, **78**, 56, **79**, 41, **80**, 19; oxide of, **76**, 25, 67; works, **77**, 37. Irrigation, French India, **77**, 33-4, 54; French Indo-China, **78**, 52-3, 53; Hasa oasis, **76**, 6; Head of Persian Gulf, **76**, 13, 17; Portu-guese India, **79**, 39; Yanaon, **77**, 7. Isa, Sheikh, ruler of island of Bahrein, **76**, 72. Isfahan, **76**, 16; caravan route, **76**, 20; plateau, **76**, 23; road, **76**, 22. Islam, Ibadhi sect of, **76**, 72-3. Islamism, **77**, 18. Italy, trade, **77**, 29, 47. Ivory, trade, **76**, 65 note.

## J.

Jadgals, Arabian coastal region, **76**, 30. Jaggery, import, **79**, 46. Jahra, cultivation, **76**, 6. Jahrum, caravan route, **76**, 21; road, **76**, 23, projection, **76**, 23. Jains, Portuguese India, **79**, 17. Japan, coal from, **78**, 56; com-munication, **80**, 14; shipping, **78**, 46; trade, **78**, 64, 65, **81**, 19, competition in East, **77**, 44. Japanese blood, **81**, 4. Jardin d'Acclimatation, **77**, 20. Jarrahi river, **76**, 12, 34; system, **76**, 17. Jasim, Sheikh, relations with Great Britain, **76**, 46-7. Jask, **76**, 18, 22, 63; British garrison established, 1898, **76**, 64, main-tained from 1878-87, **76**, 63; cable connections, **76**, 69; in possession of Sultan of Muscat, **76**, 63; pro-jected telegraph line, **76**, 63; rainfall, **76**, 27; shipping facilities, **76**, 22. Javalacoupom, lignite, **77**, 36. Jebel Akhdar, **76**, 7; heights, **76**, 7, 8. Jebel Shammar, **76**, 72; Emir, *see* Ibn Rashid. Jesuits, expulsion from Goa, 18th century, **79**, 14. Jewellery, **78**, 48. Jews, Head of Persian Gulf, **76**, 32, 33; Persian Gulf region, **76**, 71; Persian littoral, **76**, 35. Jinrickshas, trade, **81**, 19. Joasmees, **76**, 80, 81. Jones, Plaine des, reclamation by drainage, **78**, 53. Journal al Kamra, **76**, 80.

Juari (Zuari) river, **79**, 1, 10, 24, 25, 29; basin, **79**, 3; system, **79**, 26.

Jugdea (Yougdea), **77**, 2.

Jute, **78**, 50, 51; cloth, **77**, 38; sacks, import, **78**, 48, 64.

## K.

Kaab tribe, Arabian coastal region, **76**, 73; Arabistan, **76**, 55, 56, 74, piracy, **76**, 55; Persian littoral, **76**, 34; Sheikhs of the, Mohammera declared free port by, **76**, 55, request of guarantee of protection from British, **76**, 56.

Kabura, population, **76**, 32.

Kach, tribes, **76**, 35.

Kais island, **76**, 24; British occupation, **76**, 4.

Kalem river—*amways*, **78**, 40.

Kam-gia island, **80**, 1.

Kambot, market, **78**, 62; road, **78**, 62.

Kan-gio Point, **78**, 37, 45.

Kan-tho, projected railway, **78**, 38.

Kanara, North, **79**, 1.

Kangun, **78**, 17, 59.

Kao-bang province, **78**, 2, 43, 56; minerals, **78**, 57.

Kaolin, **78**, 57.

Karachi, cable connections, **76**, 69; projected telegraph line, **76**, 63.

Karikal (Karaikal), **77**, 1; acquired by France in 1739, **77**, 13; administration, **77**, 18-9; area, **77**, 1; Brahmanic castes in, **77**, 17; description, **77**, 7; education, **77**, 20; foreign trade, **77**, 29; market, **77**, 39; navigation, **77**, 25-6; petroleum dépôt, **77**, 38, 48; population, **77**, 1 note, 2-3, 6-7; port, **77**, 6, loan for improvement, **77**, 53; projected improvements, **77**, 27; railway, **77**, 23-4, 52-53; roads, **77**, 21; shipping, **77**, 28; tribes, **77**, 4.

Karim Khan, attempt to rule over Arab Sheikhs, **76**, 58; death, 1779, **76**, 58.

Karka (Kharkal, Kharkeh) river, **76**, 12; system, **76**, 17.

Karun Island (Abadan), **76**, 14; oil refinery established on, **76**, 56.

Karun river, **76**, 12, 15; grain cultivation on, **76**, 34; irrigation, **76**, 13; opened to foreign shipping and trade, 1889, **76**, 55;

Karun river—*cont.*

system, **76**, 16; trade on, **76**, 14; tribes on, **76**, 33-4.

Karwar, **79**, 1.

Kashkai tribe, Persian littoral, **76**, 35.

Kasimbazar, *see* Cossimbazar.

Kathiawar, coast, **79**, 2, 12; fishing, **79**, 42.

Katif, **76**, 6; oasis, **76**, 6, 10, agriculture, **76**, 31, description, **76**, 6, population, **76**, 31, tribes, **76**, 29, villages, **76**, 30, water supply, **76**, 9.

Kawasim, Persian Gulf region, British expedition against, **76**, 59, **76**, 59; expedition against, 1805, **76**, 44; Muscat, raids against, **76**, 41; Sheikh of the, **76**, 43, agreement signed by, 1806, *re* respect of British flag and property, **76**, 44.

Kazib bin Ahmed, Sheikh of Jural al Kamra, **76**, 80.

Kebao Island, coalfields, **78**, 56.

Keir, Major-General W. Grant, **76**, 80; expedition to Persian Gulf, 1820, **76**, 59.

Kelat, frontier between Persia and, fixed by British Commission in 1872, **76**, 63.

Kelbeh, **76**, 43.

Kelbeh, Khor, **76**, 39, 40.

Kemmarat, navigation, **78**, 35.

Kerosene oil, import, **79**, 29, 46; trade, **81**, 19.

Khalifa family, Sheikhs of Bahrein, **76**, 80.

Khamir, sulphur, **76**, 18.

Khan, rapids of, **78**, 35-6.

Kharak island, **76**, 24; under British occupation, **76**, 24, 61;

British force maintained on, **76**, 60; ceded to France, 1807, **76**, 59; Dutch fortified settlement captured by Arabs, 1766, **76**, 65.

Kharkal, Kharkeh, river, *see* Karka.

Khazal, Sheikh of Mohammera, **76**, 56; request for further assurances of protection from Great Britain, **76**, 57.

Khmer blood, **78**, 7.

Khmer country, **78**, 13.

Khojah tribe, Persian littoral, **76**, 35.

Khon Island, railways, **78**, 35-6.

Khong, occupied by France, 1893, **78**, 21.

Khsach-kandal, cotton mills, **78**, 58.

Khuntakars, Portuguese India, **79**, 22.

- Kiang Hung, left to China by treaty of 1894, **78**, 22; portion assigned to France, **78**, 22.
- Kien-an, wireless station, **78**, 47.
- Kim-son district, irrigation and drainage, **78**, 53.
- Kirman, caravan route, **76**, 20, 23; Russian Governor-General of, **76**, 23; city over Persian Makran, **76**, 63;ampur occupied by, 1844, graph and protection of telegraph construction, Persian Makran, **76**, 63.
- Kirnanshah, trade, **76**, 24.
- Kishm Island, **78**, 3, 14; garrison placed on, 18 British grant from Sultan of Muscat, 59, withdrawn, **76**, 60; description, **78**, 24; leased to Sultan of Muscat, 1794, **76**, 58; under power of Sultan of Muscat, **76**, 40.
- Kochiu, tin mines, **78**, 43.
- Koepang, *see* Kupang.
- Kompong-chnang, **78**, 36; pottery, **78**, 59; projected railway, **78**, 42.
- Kongmoon, **81**, 20; cessation of steamer service, 1915, **81**, 17; once a maritime city, **81**, 24.
- Koninklijke Paketvaart Maatschappij, **80**, 13.
- Konkani dialect, **79**, 8.
- Koweit, **76**, 3, 6, 53, 76; American Arabian Mission established, **76**, 71; bay, **76**, 5, 6, description, **76**, 9; British Political Agency established in, 1914, **76**, 53; caravan routes, **76**, 9; harbour, **76**, 8; history, &c., **76**, 51-3; population, **76**, 30, 31; recognition as independent principality under British protection, **76**, 75; Sheikh of, *see also* Mubarak, **76**, 52, 56, alliance with Ibn Saud, Emir of Nejd, **76**, 50, power of, **76**, 71, possessions, **76**, 13, private estates, **76**, 54, profession of loyalty to Great Britain, and concession made to by Government of India, **76**, 75; Sultanate of, **76**, 4, 5, 12; trade, **76**, 52; treaty with Great Britain, re slave trade, **76**, 68; tribes, **76**, 29, 73; Utubi tribe from, **76**, 45.
- Kratie, **78**, 5, 35, 36; market, **78**, 62.
- Kratt district, ceded to France, 1904, **78**, 23. ceded back to Siam, 1907, **78**, 23.
- Kshatriyas (Charados), Portuguese India, **79**, 16; Yanaon, **77**, 8.
- Ksom-gon, railway, **78**, 38.
- Ku-van, iron ore, **78**, 56.
- Kuhgilu tribe, Arabistan, **76**, 74.
- Kulacharis, Portuguese India, **79**, 22.
- Kumbakonam, **77**, 17.
- Kupang (Koepang), Dutch established at, 1618, **80**, 7.
- Kuria Muria Islands, ceded to Great Britain, 1854, by Sultan of Muscat, **76**, 41.
- Kurna, **76**, 15.
- Kutal-i-pir-Zan pass, **76**, 22.
- Kwa-dai river, shoal, **78**, 34.
- Kwa-kam river, shoals, **78**, 34-5.
- Kwa-tieu mouth, **78**, 37.
- Kwanchiap, **81**, 18.
- Kwang-chow-wan, **78**, 1; administration, **78**, 27; area, **78**, 11; leased, **78**, 11; finance, **78**, 67; projected story of, history, **78**, 10; ping community, **78**, 42; ship-trade, **81**, 21; war, **81**, 17; **78**, 47.
- Kwang-nam, gold, **78**, 57.
- Kwa-nam-trieu river, **78**, 35.
- Kwang-si, **78**, 1; limestone, **81**, 19; lines of communication, **78**, 30, 42-3; port, trade, **78**, 66; railway, **78**, 38, project, **78**, 38; trade, **78**, 64, 65.
- Kwang-tri, iron ore, **78**, 56; railway, **78**, 38, project, **78**, 41.
- Kwang-tri-tourane railway, finance, **78**, 40.
- Kwang-Tung province, **78**, 1, 11; coast, **78**, 11; limestone, **81**, 19.
- Kwang-yen province, minerals, **78**, 55; port, **78**, 4.
- Kwei-chow, Upper, *see* Upper.
- Kwi-nhon, coastal service, **78**, 47; market, **78**, 61.

## L.

- La Grândière, Admiral, Governor of Cochin China, **78**, 15; annexation of provinces, 1867, **78**, 17.
- Labour, French India, **77**, 29;
- Macao, **81**, 18; Portuguese India, **79**, 31-2; Portuguese Timor, **80**, 14-5.
- Lace, manufacture, **77**, 38.
- Laclo, road, **80**, 11.
- Lachubar region, petroleum, **80**, 19.
- Lacquer and oils, **78**, 54.
- Laduta, education, **80**, 10.

- Laga, manufactures, **80**, 19.
- Lagrée, Doudart, sent to Cambodia to counteract Siamese influence, **78**, 15-6.
- Lahane, education, **80**, 10.
- Lai-vu, bridge, **78**, 39.
- Laleia district, minerals, **80**, 19; schools, **80**, 10.
- Lally, Commissary of the King (1758-61) in Pondicherry, **77**, 18.
- Land-tax, Persian Gulf region, **76**, 74.
- Land-tenure, French India, **77**, 35, 54; French Indo-China, **78**, 54-5; Portuguese India, **78**, 40-1; Portuguese Timor, **80**, 18.
- Lanessan, de, appointed Governor-General in Tong-king, 1891, **78**, 21.
- Lang-biang plateau, **78**, 3.
- Lang-son province, **78**, 2; lead, **78**, 57; lines of communication, **78**, 30; market, **78**, 61; railway, **78**, 38, project, **78**, 38; roads, **78**, 31.
- Language, Arabian coastal region, **76**, 29; Chandernagor, **77**, 10; French Indo-China, **78**, 8; Head of Persian Gulf, **76**, 33; Macao, **81**, 4; Mahé, **77**, 9-10; Persian littoral, **76**, 34-6; Pondicherry, **77**, 4; Portuguese India, **79**, 8; Portuguese Timor, **80**, 3; Yanaon, **77**, 8.
- Lansdowne, Marquess of, assurances to Ottoman Ambassador, **76**, 53; on British policy in Persian Gulf, 1903, **76**, 69-70; statement of British policy *re* Anglo-Russian Convention, 1907, **76**, 66.
- Lao-kai, **78**, 24, 33, 43, 44; bridge, **78**, 39; railways, **78**, 38, 43, project, **78**, 38; river traffic, **78**, 33-4; road, **78**, 43.
- Laos, **78**, 1, 3, 43; administration, **78**, 25, 26, 27-8; agriculture, **78**, 49; area, **78**, 1; cattle, **78**, 51, 52; Chinese residents in, **78**, 72; education, **78**, 29; finance, **78**, 67; forests, **78**, 54; lack of manufacturing industries, **78**, 59; lines of communication, **78**, 30; markets, **78**, 62; minerals, **78**, 57, concessions, **78**, 55; native road transport, **78**, 32; population, **78**, 9; possession taken of, by French, 1893, **78**, 21; projected railways, **78**, 38; religion, **78**, 24-5; roads, **78**, 31, 32, 43; towns, **78**, 10; trade, **78**, 64.
- Laos—*cont.*  
effect of duties on, **78**, 65-6; tribes, **78**, 7-8; upper, *see that title*.
- Lappa district, **81**, 20; currency, **81**, 23.
- Lappa island (Tui-mien Shan), **81**, 1, 3, 16; claimed by Portugal, **81**, 11; customs station, trade, **81**, 20; shipping, **81**, 20-1.
- Lar, caravan route, **76**, 21; road, **76**, 23; tribes, **76**, 35.
- Larak island, description, **76**, 25.
- Larantuca, ceded to Holland, 1854, **80**, 8.
- Lardy, M., Swiss member of Hague Court of Arbitration, appointed arbitrator between Portuguese and Dutch, **80**, 8-9.
- Laristan province, **76**, 3.
- Laterite, **78**, 57.
- Latin, **79**, 20.
- Lautem, anchorage, **80**, 13; military headquarters, **80**, 20.
- Le Myre de Vilers, Governor of Cochin China, convention concluded by, at Bangkok, 1893, **78**, 21; force sent to open up Song-koi route, **78**, 18.
- Lead, **78**, 57; traffic forbidden, **78**, 66.
- Leeches, **78**, 51.
- Leichow peninsula, **78**, 1, 11.
- Lentils, **77**, 31.
- Leprosy, **81**, 3.
- Lesser Sunda islands, **80**, 6; ceded to Holland, 1854, **80**, 7-8.
- Li Hung-Chang, Tientsin Viceroy, negotiations with Capt. Fournier, 1884, **78**, 19, 20.
- Liam-poo (Ningpo), trade, **81**, 8.
- Lifau, capital of Portuguese settlements, **80**, 6; siege laid to, by Black Portuguese, 1769, **80**, 7.
- Lignite, **77**, 36.
- Lima, Lopes de, agreement with Netherlands, 1854, *re* frontiers of Timor, **80**, 7-8; arrested for exceeding his authority, **80**, 8.
- Lime, trade, **78**, 61.
- Limestone, **76**, 7, 17, **80**, 1, **81**, 19.
- Lingeh, **76**, 22, 24, 40; Arab rule established at, 1898, **76**, 62; Arab Sheikh of, degree of autonomy, **76**, 61; caravan route, **76**, 21; customs seized by Nationalists, 1909, **76**, 62; formation into Gulf port charge, 1887, **76**, 61; population, **76**, 36; port, **76**, 20, description, **76**, 21, destruction by British, **76**, 59.



Lingeh—*cont.*

- trade, **76**, 36; road, **76**, 23; trade, **76**, 21; tribes, **76**, 35.
- Lingeh district, tribes, **76**, 35.
- Liquiçá, anchorage, **80**, 13; military headquarters, **80**, 20; schools, **80**, 10.
- Liquors, customs duties on, **77**, 50; import, **77**, 48, **80**, 22.
- Lisbon, **79**, 29; cable connections, **79**, 31; shipping, **79**, 31, **80**, 13; trade, **80**, 14; treaty signed at, 1859, between Portugal and Holland, **80**, 8.
- Liu Yung-fu (Lu Vinhphuoe), leader of "Black Flags," attack on French in Tongking, **78**, 16-7.
- Liverpool, **77**, 47.
- Livestock, **78**, 51-2, **79**, 38, **80**, 17; export, **79**, 45; import, **79**, 38, 46, freedom from customs duty, **77**, 50; trade, **78**, 32.
- Loans, French India, **77**, 52-3.
- Locusts, **79**, 32, 39.
- Loin-cloths, native manufacture, **77**, 38.
- Lois river, agriculture, **80**, 15.
- Lolos tribe, French Indo-China, **78**, 8.
- London, **81**, 23; Convention signed at, 1913, between Great Britain and Turkey, **76**, 47; Ottoman Ambassador in, and Turkish claim to sovereignty over Arabia, 1874, **76**, 46.
- Long-ksuyen, granite, **78**, 57.
- Louis XIV, treaty 1787, at Versailles, *re* French assistance for Cochin China, **78**, 14-5.
- Lower Branch (Bassak) river, **78**, 36.
- Lower Laos Mountains, **78**, 3.
- Lu Vinhphuoe, *see* Liu Yung-fu.
- Luang-Prabang, **78**, 35; ceded to France, 1904, **78**, 23; King of, submission to France, 1893, **78**, 21; market, **78**, 62; population, **78**, 10.
- Luari, road needed, **79**, 25.
- Lung-chow, **78**, 43; projected railway, **78**, 43; road, **78**, 42.
- Lur dialects, **78**, 33, 36.
- Lur tribe, Arabistan, **76**, 74; Head of Persian Gulf, **76**, 33; Persian littoral, **76**, 35.
- Lynch, Messrs., steamship services, **76**, 55.

**M.**

- Macaist (Nhon) tribe, Macao, **81**, 4.
- Macao, *see also* **81**; administration, **79**, 19; Catholic diocese, **80**, 10; climate, **79**, 5; finance, **80**, 25; projected cable connection, **78**, 47.
- Macarira (St. John) island, **81**, 1; leper hospital, **81**, 3.
- Macassar, **80**, 14; trade, **80**, 21-2.
- Mace, **80**, 6.
- Machado, Governor, **79**, 40; and irrigation in Portuguese India, **79**, 39.
- Macazana, **79**, 26.
- Machinery, manufacture, **78**, 58.
- Madagascar, **80**, 6; shipping, **77**, 28.
- Madras, **77**, 1, 12, 25, 27; cyclones, **77**, 4; Government, conventions with Government of Pondicherry *re* salt, 1818 and 1837, **77**, 16, 51, and duties on wines and spirits, **77**, 37; road, **77**, 21; shipping, **77**, 27; University, **77**, 19.
- Madras and Southern Mahratta Railway Co., **79**, 28.
- Magalhaes, expedition to Timor island and Solor island, **80**, 6.
- Mahé, **77**, 1; acquired by France, 1725-6, **77**, 13; administration, **77**, 18-9; area, **77**, 2; coaling station, **77**, 9; description, **77**, 8-9; harbour, **77**, 26; market, **77**, 39; population, **77**, 1 note; projected improvements, **77**, 27; railway, **77**, 24; road, **77**, 21; school, **77**, 20.
- Mahé river, **77**, 9, 21, 26; system, **77**, 9.
- Mahratta country, **79**, 8.
- Mahratta tribe, India, incursions of, **79**, 14; Nagar Havdi ceded to Portugal by, 1780, **79**, 15; Portuguese India, **79**, 7, 16, 41.
- Maize, **78**, 50, **79**, 37, **80**, 15; export, **78**, 50, 63; trade, **78**, 61.
- Makalla Cove, coaling stations at, **78**, 42.
- Makran, **76**, 1; coast, **76**, 22, climate, **76**, 26, naval blockade of by Great Britain, **76**, 69.
- Makrani language, **76**, 36.
- Malabar, **77**, 2; coast, **79**, 3, oil industry, **77**, 38, trade competition, **77**, 40.
- Malabar district, **77**, 8-9.
- Malabar District Board, **77**, 21.

- Malacca, 77, 17; captured by Portuguese, 1511, 81, 7, 8; religion, 81, 12.
- Malaria, 76, 28, 78, 7, 80, 3, 81, 3.
- Malay Archipelago, Portuguese possessions, 80, 5.
- Malay blood, 80, 5, 81, 4.
- Malayalam tribes, Mahé, 77, 9-10.
- Malcolm inlet, harbour, 76, 11.
- Malem, Conde de, tanks on estate of, 79, 39.
- Maltar river, 77, 3, 33, 54.
- Mamassani tribe, Persian littoral, 76, 35.
- Man-hao, 78, 4, 33, 43.
- Manama, *see* Bahrein.
- Manamutty, 77, 26.
- Manari district, road, 79, 24.
- Manatuto, anchorage, 80, 13; military headquarters, 80, 20; road, 80, 11; schools, 80, 10.
- Mancatar territory, retained by Holland by treaty of 1859, 80, 8; transferred to Portugal, 1914, 80, 9.
- Manchuria, railways, 78, 43.
- Mandavi river, 79, 1, 4, 14, 30; basin, 79, 3; submarine cable laid in, 79, 31; system, 79, 26.
- Mandavi valley, road, 79, 24.
- Mandonim, road needed, 79, 25.
- Manganese oil export, 79, 29.
- Manganese ore, trade, 79, 27.
- Mangoes, 76, 18, 77, 30.
- Manila, cable connections, 78, 47; river traffic, 78, 36; steamer service, 78, 46; trade, 81, 19.
- Manioc, 80, 15.
- Manoel, King, embassy despatched to Macao, 81, 7.
- Mans tribe, French Indo-China, 78, 8.
- Manu-Fai, agriculture, 80, 17.
- Manufactured goods, import, 77, 49.
- Manufactures, French India, 77, 36-8; French Indo-China, 78, 57-9; Macao, 81, 18-9; Portuguese India, 79, 42-3; Portuguese Timor, 80, 19.
- Manure, trade, 78, 61.
- Mao-khe, porcelain and faience works, 78, 58.
- Maplais (Maplots), in Mahé, 77, 9.
- Mapuçã, 79, 26; description, 79, 11; education, 79, 20; fairs, 79, 43; population, 79, 11; post office, 79, 28; road, 79, 24.
- Mapuçã river, 79, 26, 37; projected canal, 79, 27; scheme for deepening, 79, 26-7.
- Marakat Abadan, 76, 13.
- Marakat Abdullah, 76, 13.
- Marathi language, 79, 8, 20.
- Marathi schools, 79, 20.
- Margão, 79, 26; description, 79, 11; education, 79, 20; population, 79, 11; post office, 79, 28; projected railway, 79, 28; railway station, 79, 27; road, 79, 25.
- Margil, 76, 14.
- Maritime Chiefs, and treaties for suppression of slave trade, 76, 44.
- Maritime Truce, 1835, 76, 45; renewals, 76, 44; signature of Sheikhs to, 76, 43.
- Markets, French Indo-China, 78, 61-2.
- Marmagão (Mormugão) peninsula, 79, 4, 14; climate, 79, 5; minerals, 79, 41; railway, 79, 27; construction, 79, 48; project, 79, 28; station, 79, 27; steamer service, 79, 30; trade, 79, 45;.
- Marmagão (Mormugão) port, 79, 10-1, 31; description, 79, 28-9; trade, 79, 44.
- Marobo, sulphur, 80, 19.
- Marobo river, 80, 19.
- Maromatu deity, 80, 10.
- Marsh fevers, 77, 4.
- Martin, François, leader of refugees in landing at Pondicherry, 1674, 77, 12.
- Marty, shipbuilding firm, 78, 44.
- Massordem, road, 79, 24.
- Masulipatam, 77, 2, 12.
- Matches, factories, 78, 58, 59; trade, 78, 61.
- Mats, export, 81, 21; import, 81, 21; manufacture, 77, 38, 78, 58, 80, 19, 81, 18; trade, 78, 61.
- Matra, 76, 11; bays, 76, 11; caravan route, 76, 32; population, 76, 32; tribes, 76, 30.
- Matshe river, 78, 11.
- Maubára, anchorage, 80, 13; road, 80, 11.
- Mauritius, capture by British, 1810, effect on French prestige in East African and Arabian waters, 76, 41.
- Mayotte, shipping, 77, 28.
- Mazavaram, 77, 32.
- Measles, 79, 7.
- Meat, trade, 78, 61.
- Mechanical weaving, 77, 36.
- Medicines, import, 81, 21.
- Medicinal plants, 78, 50; trade, 78, 61.

- Mehemet Ali, Viceroy of Egypt, designs in Eastern Arabia, **78**, 49.
- Mehong river, **78**, 1, 2, 3, 4, 7, 10, 21, 22, 23, 30, 42, 54, 59, 62; delta, **78**, 4, population, **78**, 9; exploration undertaken by Garnier, **78**, 16; forests, **78**, 51; left bank evacuated by Siamese, 1893, **78**, 21, 22; neutral zone renounced in favour of Siam, by France, 1904, **78**, 23; population on banks, **78**, 10; steam ferry, **78**, 32; system, **78**, 5-6, 35-7; timber floated down on, **78**, 59.
- Mekong valley, **78**, 2; stock rearing, **78**, 51; trade, **78**, 66.
- Mekong thalweg, **78**, 2.
- Melons, **79**, 37.
- Melupré, ceded to France, 1904, **78**, 23.
- Meng-tse, railway, **78**, 43, extension, **78**, 43; river traffic, **78**, 33; road, **78**, 43.
- Meos tribe, French Indo-China, **78**, 8.
- Meru, road needed, **79**, 25.
- Meshed, trade route, **76**, 21.
- Mesopotamia, **76**, 2, 4; British interests in, **76**, 67; plague, **76**, 28; plains, **76**, 3; trade, **76**, 14, 15; Wahabi aggressions in, **76**, 49.
- Mesopotamian depression, **76**, 19.
- Mesquita, Lt., fort of Passaleão seized by, **81**, 11.
- Messageries Fluviales de Cochinchine, **78**, 36, 45.
- Messageries Maritimes, **77**, 28, **78**, 45, 46; coastal service, **78**, 47; steamer service in Persian Gulf, and failure, **76**, 65.
- Metal work, export, **77**, 46; manufacture, **79**, 42; trade, **78**, 61.
- Metals, **78**, 43; imports, **78**, 64, 65; manufacture, **78**, 58.
- Meto river, **80**, 1.
- Midhat Pasha, administrative reforms, 1869, Persian Gulf regions, **76**, 53-4; expedition to Arabia, 1871, **76**, 50; leader of Turkish expedition to Hasa, 1871, **76**, 44, effect on situation in El-Katr, **76**, 46.
- Military organization, Portuguese India, **79**, 19.
- Millet, **77**, 31, **79**, 36, **80**, 15.
- Minab, **76**, 18, 26; leased to Sultan of Muscat, 1794, **76**, 58.
- Minab river, delta, **76**, 18; system, **76**, 25.
- Minerals, **77**, 36, **78**, 55-7, 61, **79**, 41-2, 45, **80**, 19; concessions, **77**, 36, **78**, 55, 60; export, **79**, 45, duty, **79**, 45.
- Missions Étrangères, College of, at Pondicherry, **77**, 19.
- Mizal, Sheikh (Muhaisin), reign of, 1881-97, **76**, 56; assassination, 1897, **76**, 56.
- Mo-ksat, iron ore, **78**, 56.
- Modeliarpath, population, **77**, 5.
- Mohammed Ibn Saud, Sheikh of Deraya, adoption of Wahabi principles, **76**, 49.
- Mohammedans, French India, **77**, 18; Mahé, **77**, 9; Persian Gulf region, **76**, 79, religion, **76**, 71; Portuguese India, **79**, 8, 17, capture of Goa, 1479, **79**, 14.
- Mohammera, **76**, 12, 15, 16, 58, 75; Belgian administration in, **76**, 73; British Vice-Consulate established at, 1890, **76**, 56; captured by British, 1857, **76**, 56, 60-1; captured and plundered by Turks, 1837, **76**, 55; declared to be within Persian Empire by Treaty of Erzerum, 1847, **76**, 55; emigration, **76**, 34; Muhaisin centre at, **76**, 74; population, **76**, 33; port, description, **76**, 14, trade, routes, **76**, 4; rebuilding of town by Sheikh of Muhaisin tribe, 1812, **76**, 55; Sheikh of, *see also* Khazal, **76**, 3, British concessions to, on account of loyalty during European war, **76**, 75, control over customs of Arabistan till 1902, **76**, 56, power of, **76**, 73, private estates, **76**, 54, profession of loyalty to Great Britain, and concession made to, by Government of India, **76**, 75, request for British protection, 1898, **76**, 56; tribes, **76**, 33, 34.
- Moluccas, the, **80**, 6; contests *re*, between Spain and Portugal, **80**, 6.
- Mon-kay province, **78**, 3, 57; lead, **78**, 57; porcelain and faience works, **78**, 58.
- Mong-ha hill, **81**, 3.
- Mormugão, *see* Marnagão.
- Moslem revival, **76**, 49.
- Mosquitoes, **78**, 51, **79**, 39.
- Motael, agriculture, **80**, 15; military headquarters, **80**, 20.
- Mother-of-pearl, **77**, 38.
- Moutalpell native industries at **77**, 38.

Moutiampett, 77, 22.  
 Mozambique, administration, 79, 19; refusal of Europeans to embark to, 1895, 79, 19.  
 Mubarak, Sheikh of Koweit, agreement with Great Britain, 1899, 76, 52; request for British protection, 1897, 76, 52.  
 Mudrapalaiyam, wells at, 77, 5.  
 Muhaisin tribe, Arabian coastal region, 76, 73; Arabistan, 76, 55, 74; Head of Persian Gulf, 76, 34.  
 Muhammad, Sheikh of Deboy, 76, 80.  
 Muharrak island, 76, 9; population, 76, 31.  
 Muk pass, 76, 23.  
 Mulberry trees, 78, 51.  
 Mules, 78, 32.  
 Mund river, 76, 18; system, 76, 25.  
 Mung Lem, left to China by treaty of 1894, 78, 22.  
 Munitions, import, 81, 21.  
 Muong-sing, 78, 43.  
 Musa, Khor, 76, 17; system, 76, 13.  
 Musandim peninsula, 76, 2; importance of, 76, 42; Sultan of Muscat's claim to, acknowledged, 1905, 76, 40.  
 Muscat, 76, 7, 8, 22, 40, 63, 75; administration, 76, 40; agreements and treaties, with America, 1833, 76, 41, with France, 1844, 76, 65, 69, with Great Britain, 1839, 76, 41, 1891, *re* British interests in Muscat, 76, 42; American-Arabian Mission established at, 76, 71; arms traffic, friction caused by, 76, 66; bays, 76, 11; cable connections, 76, 69; climate, 76, 27; coast, 76, 7, description, 76, 10; dhows and French flags, settlement of question, 1905, 76, 66; expulsion of Portuguese from, 1652, 76, 40; French consuls at, grants of French ship's papers and flags to Muscat dhows, difficulties *re*, 76, 42-3; French influence in, and appointment of Vice-Consul, 76, 42; history, &c., 76, 39-43; independence from Baghdad Caliphate, 5th century, 76, 40; population, 76, 32; rebellious tribes held back from, by Indian Army, 76, 43; Sultan of, administration, 76, 40, agreements, with East India Co., 1789, *re* exclusion of French and

# Muscat—*cont.*

Dutch from his territory if at war with England, 76, 40, confirmation, 1800, 76, 40, with France, 1807, 1808, 76, 40-1, with Great Britain, 1822, *re* slave trade, 76, 68, claim to Bandar Abbas and its dependencies, 76, 60, claim to peninsula of Musandim acknowledged, 1905, 76, 40, dominions, 76, 39-40, 63, expedition against the Kawasim, 1805, 76, 44, grant to maintain British garrison on Kishm Island, 1820, 76, 59, grant of tract of land at Basidu to British Government, 76, 60, independence recognised by Great Britain and France, 1862, 76, 42, invasion and conquest of Bahrein, 1822, 76, 47, lease of Bandar Abbas and its dependencies obtained, 1794, 76, 58, lapse of lease, 1868, 76, 61, lease of coaling station at Bandar Jissa granted to France, 1898, 76, 42, cancelled by British ultimatum, 76, 42, lease of islands of Kishm and Hormuz cancelled, 1868, 76, 40, relations with Great Britain, 76, 41; trade, 76, 11; tribes, 76, 30.  
 Mussulmans, *see* Mohammedans.  
 My-tho, 78, 37; captured, 1861, 78, 15; lines of communication, 78, 30; market, 78, 62; population, 78, 10; power station, 78, 59; railway, 78, 39; rice mills, 78, 59.  
 Mysore, 77, 17.

## N.

Na-cham, 78, 43.  
 Nadir Shah, attempt to extend authority to Persian Makran, 1739, 76, 63; and Persian navy in Gulf, 76, 58, 62; death, 1747, 76, 58.  
 Naer, *see* Damão Grande.  
 Nagar Haveli, 79, 4; agriculture, 79, 37; ceded to Portugal by Mahrattas, 1780, 79, 15; climate, 79, 6; forests, 79, 34, 40; lack of means of communication, 79, 33; land, 79, 41; pargana, 79, 2, 4; Parsees of, 79, 33; Sudra caste, 79, 16; towns, 79, 11 tribes, 79, 12.  
 Nagari alphabet, 79, 8.

Nagore, 77, 1.  
 Nalutara, 77, 2, 9.  
 Nam-dinh, 78, 27; distillery products, 78, 58; French garrison, 78, 18; manufactures, 78, 58; minerals, 78, 55; population, 78, 9; port, 78, 4; river traffic, 78, 34; trade, 78, 61.  
 Nam-huong river, 78, 2.  
 Nam-kwan, 78, 43; railway, 78, 38; road, 78, 42; trade, 78, 64.  
 Nam-ti river, bridge, 78, 39.  
 Nan-ning, projected railway, 78, 42, 43; road, 78, 42.  
 Nandalar river, 77, 6.  
 Nankeen, export, 81, 21.  
 Napoleonic wars, 77, 14, 81, 10.  
 Naroli, road, 79, 25; trade, 79, 11, 43.  
 Nasir-ud-Din, Shah, attempt to form Persian Navy in the Gulf, 1865, 76, 62; reign and death, 1896, 76, 62, 64.  
 Nasiri (Nizari) tribe, Arabian coastal region, 78, 29; Oman, 76, 72.  
 Native currency, 78, 71.  
 Native industries, French India, 77, 38.  
 Natural resources, State control, French Indo-China, 78, 60-1.  
 Nau-chow island, 78, 11.  
 Nautical fittings, 77, 38.  
 Nawabandar, 79, 2.  
 Naya caste, Mahé, 77, 10.  
 Nedouncadou, population, 77, 6-7.  
 Negapatam, 77, 24; shipping, 77, 27.  
 Nejd, 76, 72, 76; caravan routes to, 76, 9; Emir of, *see also* Ibn Saud, 76, 49, dominions and power of, 76, 49.  
 Nellitope, native industries at, 77, 38.  
 Neravy, population, 77, 6-7.  
 Nettarepacon, population, 77, 5.  
 New Caledonia, mining regulations, 1883, 77, 36.  
 New Conquests, 79, 1, 3, 38; administration, 79, 18-9; acquired by Portugal, 18th century, 79, 13; agriculture, 79, 35; climate, 79, 7; communities, 79, 23; forests, 79, 33-4; Hindu temples, 79, 17; land tenure, 79, 40; population, 79, 9; property, 79, 41.  
 New Goa, *see* Panjim.  
 Nguyen rulers of South Annam, encroachments in Cochinchina, 78, 13-4; power, 78, 14.

Nha-trang, coastal service, 78, 47; railway, 78, 38, project, 78, 39.  
 Nha-trang-Saigon, railway finance, 78, 40.  
 Nhon tribe, *see* Macaist.  
 Ningpo, *see* Liampoo.  
 Ninh-binh province, irrigation and drainage, 78, 53; market, 78, 61; roads, 78, 31.  
 Nitrate, 78, 5.  
 Nizari tribe, *see* Nasiri.  
 Noemuti, ceded to Holland, 1914, 80, 9.  
 Nong-son, coalfield near, 78, 56.  
 Norddeutscher Lloyd, 78, 46.  
 Norodom, King of Cambodia, convention with M. Thomson, Governor of Indo-China, 1863, 78, 19; Doudart Lagrée sent to, to counteract Siamese influence, 78, 15-6.  
 North China railways, 78, 42.  
 Norway, 79, 3; shipping, 78, 46, 79, 29; trade, 77, 29, 47.  
 Nung tribe, French Indo-China, 78, 8.

## O.

Oceania, mails, 80, 11-2.  
 Ocussi, anchorage, 80, 13; military headquarters, 80, 20.  
 Ocussi enclave, 80, 1, 2, 4, 7; agriculture, 80, 17; retained by Portugal, by treaty of 1859, 80, 8, by decision of M. Lardy, 1914, 80, 8-9.  
 Odessa, steamer service, 76, 66.  
 Oil, exploitation for, in Arabistan, 78, 57; export, 81, 21; fields, 76, 4; import, 77, 49, 80, 22, 81, 21; industry, 77, 37; decay, 77, 38; products, 78, 51; seeds, trade, 79, 27.  
 Oil of sesame, export, 77, 45.  
 Okwair (Ojair), 76, 6, 45; port, 76, 9, description, 76, 10; trade, 76, 10.  
 Old Conquests, 79, 1, 3, 38; administration, 79, 18-9; agriculture, 79, 37; attempt to spread the orthodox faith, 79, 17-8; climate, 79, 7; communities, 79, 23; emigration, 79, 32; land tenure, 79, 40; population, 79, 9; property, 79, 41; Roman Catholics in, 79, 17; towns, 79, 10; villages, 79, 12.

- Old Goa, description, **79**, 10; road, **79**, 24.
- Olive oil, **77**, 30.
- Oman, **78**, 5, 8, 10, 72; administration, **78**, 40, 72; annexation of Charbar, 1792, **78**, 40; Arabs in, **78**, 29; British Protectorate established over, **78**, 42; civil war, 18th century, **78**, 72; coast, **78**, 2; fresh lease of Bandar Abbas granted to, 1868, but terminated in same year, **78**, 60; Hajar of, **78**, 7; mountains, **78**, 2, 4, 7; political differences in, **78**, 72; population, **78**, 31; Sultanate of, **78**, 3, 6, 39, Ibadhi and Sunni sects in, **78**, 71, population, **78**, 31; trade, **78**, 11; treaty with Persia, 1856, *re* Bandar Abbas, **78**, 60; tribes, **78**, 29, 30, 72, tribal organisation, **78**, 73; villages, **78**, 30; Wahabis of, **78**, 73; watercourses, **78**, 11.
- Oman, Gulf of, **78**, 8, 43, 49; area, **78**, 1; British naval blockade in, **78**, 69; coast, **78**, 10-1, tribes, **78**, 29; Russian attempt to establish naval base at, **78**, 66; Shiah sect, **78**, 71; suppression of piracy, **78**, 41.
- Omani tribe, aggression in Bahrein, **78**, 47.
- Omoun, **81**, 5.
- Onions, export, **77**, 46.
- Opium, Conventions *re*, **77**, 16; cultivation, **77**, 31, 50, 51; export and import duties, **80**, 23; import, **78**, 64, **81**, 21; industry, **79**, 42, **81**, 18; production and trade in French India forbidden, **77**, 51; trade, **78**, 61, **81**, 19-20, restrictions, **81**, 18.
- Oranges, **77**, 30.
- Oriental Christians, Head of, Persian Gulf, **78**, 33; Persian Gulf region, **78**, 71.
- Ormara, climate, **78**, 26.
- Orme, R., on destruction of Pondicherry, **77**, 13.
- Ormuz, **78**, 25.
- Orta, Garcia da, on products of Timor island, **80**, 5-6.
- Oulgaret, **77**, 1, 22; population, **77**, 5.
- Our Lady of Miracles, church dedicated to, **79**, 11.
- Oussoudou, **77**, 22.
- Oussoudou, Lake, **77**, 3.
- Outram, Sir J., in command of British force in Persia, **78**, 60-1.
- Oxen, **77**, 32, **78**, 52; import, **77**, 32.
- Oysters, export, **81**, 20.

## P.

- Pack-thread, import, **77**, 49.
- Paço d'Arcos (Silvassa), **79**, 11; road, **79**, 25.
- Pak-moun, **78**, 2, 36, 44.
- Pak-moun river, **78**, 5; navigation, **78**, 35.
- Pak-on Bay, **81**, 2.
- Pak-se, market, **78**, 62.
- Paletuvier bark, **78**, 54.
- Palm trees, **78**, 12, **79**, 6; juice, manufacture, **77**, 38; liquor distilled from, **77**, 50.
- Palour, **77**, 2, 9.
- Pambear river, **77**, 1, 3, 22.
- Pandaquel, **77**, 2, 9.
- Panjim (New Goa), **79**, 11, 27; bank, **79**, 49; change of Government to, **79**, 7, 15; description, **79**, 10; education, **79**, 20; library, **79**, 8; population, **79**, 10; port, description, **79**, 28, 29-30, trade, **79**, 44; post office, **79**, 28; road, **79**, 24, 25; telegraph office, **79**, 28.
- Paper, export, **81**, 20; industry, **78**, 54, 58, 59; import, **79**, 29; money, **78**, 71, convention of 1878 *re*, **79**, 49; trade, **78**, 61.
- Papuan blood, **80**, 3.
- Paralam, railway, **77**, 7, 23, 52-3.
- Parc Colonial, **77**, 20.
- Paris, Chambers in, **77**, 18, 19; Chinese representative, protest against advance on Son-tai, **78**, 19; declarations and treaties signed at, 1857, between Great Britain and Persia, **78**, 61, 1862, *re* independence of Muscat, **78**, 41-2, 1867, between France and Siam, **78**, 16, 1885, between France and China, **78**, 19; Peace of, 1763, restoration of possessions in India to France by, **77**, 14.
- Paroda, irrigation canal, **79**, 39.
- Parsees, Portuguese India, **79**, 8, 12, 17, 33.
- Passaleão, fort, garrisoned by Chinese troops, **81**, 11.
- Patane, **81**, 6.
- Patenôte, M., treaty between France and China signed by, 1884, **78**, 19.

Patna, **77**, 2.  
 Patnulkarans, weavers, in French India, **77**, 38.  
 Patti, road needed, **79**, 25.  
 Pax Britannica, **76**, 68.  
 Pearl diving and fisheries, **76**, 26, 31, 32, 36, 45, 62, 69.  
 Pearl-oyster, **80**, 19.  
 Peas, **77**, 31.  
 Pedra d'Areca, projected break-water, **81**, 16.  
 Peking, **78**, 18, 22, **81**, 8; British Minister at, protest against cession of part of Kiang Hung to France, **78**, 23.  
 "Peking Gazette," **78**, 18.  
 Pelly, Colonel, report on Koweit, 1863, **76**, 52.  
 Penang, shipping, **77**, 28.  
 Peninsular Oriental, steamer services, **78**, 46.  
 Pepper, **77**, 33, **78**, 50; export, **78**, 50, 63, duty, **78**, 65; trade, **78**, 61, 62.  
 Perestrello, Rafael, visit to China, 1514 or 1516, **81**, 7; return to Portugal, **81**, 7-8.  
 Perfumery, **78**, 59.  
 Pernem province, **79**, 1, 3, 26; forests **79**, 34; minerals, **79**, 41; post office, **79**, 28; salt works, **79**, 41.  
 Perpetual Treaty of Peace, 1853, **76**, 44.  
 "*Persepolis*," arrival in Persian Gulf, 1885, **76**, 62.  
 Persia, **76**, 1, 16; *see also* **76** Contents; acquainted with Agreement of 1892, **76**, 45; agreements and treaties, with France, 1807, **76**, 59, with Great Britain, 1801, 1809, 1812 and 1814, 1841, 1851, 1857, **76**, 59, 60, 61, with Oman, 1856, *re* Bandar Abbas, **76**, 60, with Russia, 1889, *re* railway construction in Persia, **76**, 66; attempts to seize Guadar enclave, **76**, 40; authority exercised on Persian Gulf during reign of Nasir-ud Din Shah, **76**, 62; boundary between Turkey and, **76**, 54; capture of Basra, 1776, **76**, 52; capture of Charbar, 1792, **76**, 46, 63; claims to Mohammera, **76**, 55; coast, **76**, 2, 18, administration, **76**, 74, climate, **76**, 27, history, &c., **76**, 58-63; coastal plain, **76**, 17; commercial interests of Portugal in, **76**, 64; construction of telegraph lines in and across, 1868 and 1870, **76**, 61; contract given to German

# Persia—cont.

firm for construction of two steamers, 1883, **76**, 62; and expulsion of Arab rulers in Persian littoral, **76**, 61; flag hoisted on Siri Island, 1887, **76**, 61; French missions to, between 1796 and 1809, **76**, 59; friction with Sheikh of Bushire, **76**, 60; frontier between Kelat and, fixed by British Commission in 1872, **76**, 63; hills, **76**, 17; influence and intrigue, Persian Gulf region, **76**, 62, Persian Makran, **76**, 63-4; interests of Russia in, **76**, 66; Nationalist Party in, aversion to foreign control, **76**, 66; occupation in Oman, remains, **76**, 29; operations against Herat, 1837-8, **76**, 60; plateau, **76**, 12, 17, 18, 24, 35; ports, **76**, 20, 21; protest against British occupation in Kishm island, **76**, 59 and note; protest to Turkey against construction of fortifications in Fao, **76**, 54; routes, **76**, 22; rule in Bahrein till 1783, **76**, 47; Shah, degree of control in Persian Gulf region, **76**, 54; Southern, construction of railways in, assurance to Great Britain *re*, 1888, by Russia, **76**, 66, Russian plague missions despatched to, **76**, 66; sovereignty over Muscat, 1737-44, **76**, 40; trade, **76**, 14, 15, 16, 22, routes, **76**, 3; war with Great Britain, 1856, **76**, 60-1; wars with Russia between 1804 and 1828, **76**, 58; withdrawal of British troops from, 1857, **76**, 61.  
 Persian Arabs, Persian littoral, **76**, 34.  
 Persian blood, Arabistan, **76**, 33; Bahrein, **76**, 47; Persian littoral, **76**, 35.  
 Persian Central Government, attempts to undermine semi-independence of Sheikh of Mohammera, **76**, 56; rebellion against in Persian Makran, **76**, 64.  
 Persian Gulf Telegraphs, Director of, charge of British interests in Persian Makran, **76**, 64.  
 Persian language, **76**, 30, 33, 34, 36.  
 Persian littoral, **76**, 2; *see also* **76** Contents; coast, **76**, 19-20; description, **76**, 3, 17-26.  
 Persian Makran province, *see also* **76** Contents; **76**, 3, 19, 26; administration, **76**, 74-5; coastal

Persian Makran—*cont.*

- plain, **76**, 18-9; disturbances in, **76**, 75; harbours, **76**, 21-2; history, &c., **76**, 63-4; language, **76**, 36; population, **76**, 36; rivers, **76**, 25; Sunni sect in, **76**, 71; tribes, **76**, 35.
- Persian Sanitary Council, foundation, 1904, **76**, 28-9.
- Persians, Arabian coastal region, **76**, 29; Head of Persian Gulf, **76**, 32, 33; Persian littoral, **76**, 34, 35, 36.
- Petrol, import, **78**, 64, 65; trade, **78**, 61.
- Petroleum, **80**, 19; dépôt at Karikal, **77**, 38; export, **81**, 21; import, **77**, 48, **81**, 21.
- Phat-diem, manufactures, **78**, 58.
- Philastre, M., sent to apologise to King of Annam, **78**, 17.
- Philip II, King of Spain, effect of accession to crown of Portugal on Portuguese possessions, **81**, 9-10.
- Philippines, **80**, 6, **81**, 4; trade, **78**, 63-4, **81**, 10.
- Phu-doan, **78**, 34.
- Phu-lang-thuong, market, **78**, 61.
- Phu-ninh-giang, tramways, **78**, 40.
- Phu-yen, horse-breeding, **78**, 52.
- Pi-che-tchai, railway, **78**, 43.
- Pickles, tariffs, **80**, 23.
- Piece goods, export, **79**, 42.
- peau de Béhaine, Bishop, sent to Nguyễn to evoke assistance for 14; treaty, 18th century, **78**, XIV, 1787, concluded with Louis for Cochin China, such assistance
- Pigs, **78**, 51, 52, **79**, 38; export, **78**, 52, **81**, 20; import, **81**, 21.
- Pine apple plant, **78**, 54.
- Piracy and plunder, **76**, 48, 55, **78**, 79, **78**, 17, 21, **81**, 11, 20; British action taken against, 1819, **76**, 44; increase in, **76**, 46, 47, 49; measures for suppression of, **76**, 41, 45, 68; Persian Gulf, **76**, 45-6, 59 note; temporary cessation, 1806-8, **76**, 44.
- Pirate Coast, **76**, 43; change of name to Trucial Oman, 1835, **76**, 44.
- Pires, Thomé, expedition to Canton river as Ambassador, **81**, 8; visit to Peking, sent back to Canton, **81**, 8, death, 1524, **81**, 8.
- Plague, **76**, 28, **81**, 3.
- Plassey, battle of, **77**, 13.
- Plaster of Paris, **76**, 36.

Pnom-deck, iron ore, **78**, 56.

Pnom-penh, **78**, 5, 36; bank, **78**, 71; market, **78**, 62; population, **78**, 10; projected railway, **78**, 38, 41; river traffic, **78**, 36; roads, **78**, 30, 32, 44; saw mills, **78**, 59.

Po-Tao, **78**, 11.

Polem, **79**, 1.

Political conditions, Persian Gulf region, **76**, 71-6.

Pomegranates, **77**, 30.

Ponda province, **79**, 1; agriculture, **79**, 35, 37; labour, **79**, 31-2; mountains, **79**, 3; population, **79**, 9; post office, **79**, 28; road, **79**, 24, 25.

Pondicherry, **77**, 1, 2, 3, 6, 12, 22; administration, **77**, 18-9; area, **77**, 1, 5; Brahmanic castes in, **77**, 17; British Consular Agent, **77**, 15; captured by Dutch, 1693, **77**, 13, restored to France, 1697, **77**, 13; captured by Eyre Coote, 1761, and destroyed, **77**, 13; Chamber of Commerce established, 1879, **77**, 39; coasting trade, **77**, 28; colleges, **77**, 19-20; development, **77**, 14; exports, **77**, 43; fortifications erected by French, about 1675-6, **77**, 12-13; French landing at 1674, and trading station established, **77**, 12-3; Government, conventions, with Madras Government *re* salt, 1818 and 1837, **77**, 16, 51; market, **77**, 39, 49; population, **77**, 1 note, 2-3, 5; projected improvements, **77**, 27; public library, **77**, 20; railways, **77**, 22-3, construction, loan for, **77**, 53, project, **77**, 24; rebuilding of, **77**, 14; roads, **77**, 21, 30; shipping, **77**, 27, 28, accommodation, **77**, 25; telegraphic system, **77**, 25; tonnage and foreign trade, **77**, 20; trade, **77**, 40; tribes, **77**, 4; water supply, loan for improvement, **77**, 22.

Pondicherry district, floods in 1884, **77**, 15.

Pondicherry Railway Co., **77**, 22, 23.

Ponnaiyar river, **77**, 1, 3, 22, 33.

Pontianak, cable connections, **78**, 47.

Population, Arabian coastal region, **76**, 30-2; Chandernagor, **77**, 10; French India, **77**, 1 note, 2-3, 5, 6-7; French Indo-China, **78**, 8-9; Head of Persian Gulf, **76**, 33; Macao, **81**, 4-6; Mahé, **77**, 10;



Patna, 77, 2.  
 Patnulkarans, weavers, in French India, 77, 38.  
 Patti, road needed, 79, 25.  
 Pax Britannica, 76, 68.  
 Pearl diving and fisheries, 76, 26, 31, 32, 36, 45, 62, 69.  
 Pearl-oyster, 80, 19.  
 Peas, 77, 31.  
 Pedra d'Areca, projected break-water, 81, 16.  
 Peking, 78, 18, 22, 81, 8; British Minister at, protest against cession of part of Kiang Hung to France, 78, 23.  
 "Peking Gazette," 78, 18.  
 Pelly, Colonel, report on Koweit, 1863, 78, 52.  
 Penang, shipping, 77, 28.  
 Peninsular Oriental, steamer services, 78, 46.  
 Pepper, 77, 33, 78, 50; export, 78, 50, 63, duty, 78, 65; trade, 78, 61, 62.  
 Perestrello, Rafael, visit to China, 1514 or 1516, 81, 7; return to Portugal, 81, 7-8.  
 Perfumery, 78, 59.  
 Pernem province, 79, 1, 3, 26; forests 79, 34; minerals, 79, 41; post office, 79, 28; salt works, 79, 41.  
 Perpetual Treaty of Peace, 1853, 76, 44.  
 "*Persepolis*," arrival in Persian Gulf, 1885, 76, 62.  
 Persia, 76, 1, 16; *see also* 76 Contents; acquainted with Agreement of 1892, 76, 45; agreements and treaties, with France, 1807, 76, 59, with Great Britain, 1801, 1809, 1812 and 1814, 1841, 1851, 1857, 76, 59, 60, 61, with Oman, 1856, *re* Bandar Abbas, 76, 60, with Russia, 1889, *re* railway construction in Persia, 76, 66; attempts to seize Guadar enclave, 76, 40; authority exercised on Persian Gulf during reign of Nasir-ud Din Shah, 76, 62; boundary between Turkey and, 76, 54; capture of Basra, 1776, 76, 52; capture of Charbar, 1792, 76, 46, 63; claims to Mohammera, 76, 55; coast, 76, 2, 18, administration, 76, 74, climate, 76, 27, history, &c., 76, 58-63; coastal plain, 76, 17; commercial interests of Portugal in, 76, 64; construction of telegraph lines in and across, 1868 and 1870, 76, 61; contract given to German

# Persia—cont.

firm for construction of two steamers, 1883, 76, 62; and expulsion of Arab rulers in Persian littoral, 76, 61; flag hoisted on Siri Island, 1887, 76, 61; French missions to, between 1796 and 1809, 76, 59; friction with Sheikh of Bushire, 76, 60; frontier between Kelat and, fixed by British Commission in 1872, 76, 63; hills, 76, 17; influence and intrigue, Persian Gulf region, 76, 62, Persian Makran, 76, 63-4; interests of Russia in, 76, 66; Nationalist Party in, aversion to foreign control, 76, 66; occupation in Oman, remains, 76, 29; operations against Herat, 1837-8, 76, 60; plateau, 76, 12, 17, 18, 24, 35; ports, 76, 20, 21; protest against British occupation in Kishm island, 76, 59 and note; protest to Turkey against construction of fortifications in Fao, 76, 54; routes, 76, 22; rule in Bahrein till 1783, 76, 47; Shah, degree of control in Persian Gulf region, 76, 54; Southern, construction of railways in, assurance to Great Britain *re*, 1888, by Russia, 76, 66, Russian plague missions despatched to, 76, 66; sovereignty over Muscat, 1737-44, 76, 40; trade, 76, 14, 15, 16, 22, routes, 76, 3; war with Great Britain, 1856, 76, 60-1; wars with Russia between 1804 and 1828, 76, 58; withdrawal of British troops from, 1857, 76, 61.  
 Persian Arabs, Persian littoral, 76, 34.  
 Persian blood, Arabistan, 76, 33; Bahrein, 76, 47; Persian littoral, 76, 35.  
 Persian Central Government, attempts to undermine semi-independence of Sheikh of Mohammera, 76, 56; rebellion against in Persian Makran, 76, 64.  
 Persian Gulf Telegraphs, Director of, charge of British interests in Persian Makran, 76, 64.  
 Persian language, 76, 30, 33, 34, 36.  
 Persian littoral, 76, 2; *see also* 76 Contents; coast, 76, 19-20; description, 76, 3, 17-26.  
 Persian Makran province, *see also* 76 Contents; 76, 3, 19, 26; administration, 76, 74-5; coastal

**Persian Makran—cont.**

- plain, **76**, 18–9; disturbances in, **76**, **75**; harbours, **76**, 21–2; history, &c., **76**, 63–4; language, **76**, **36**; population, **76**, **36**; rivers, **76**, **25**; Sunni sect in, **76**, **71**; tribes, **76**, **35**.
- Persian Sanitary Council, foundation, 1904, **76**, 28–9.
- Persians, Arabian coastal region, **76**, **29**; Head of Persian Gulf, **76**, **32**, **33**; Persian littoral, **76**, **34**, **35**, **36**.
- Petrol, import, **78**, **64**, **65**; trade, **78**, **61**.
- Petroleum, **80**, **19**; dépôt at Karikal, **77**, **38**; export, **81**, **21**; import, **77**, **48**, **81**, **21**.
- Phat-diem, manufactures, **78**, **58**.
- Philastre, M., sent to apologise to King of Annam, **78**, **17**.
- Philip II, King of Spain, effect of accession to crown of Portugal on Portuguese possessions, **81**, 9–10.
- Philippines, **80**, **6**, **81**, **4**; trade, **78**, 63–4, **81**, **10**.
- Phu-doan, **78**, **34**.
- Phu-lang-thuong, market, **78**, **61**.
- Phu-ninh-giang, tramways, **78**, **40**.
- Phu-yen, horse-breeding, **78**, **52**.
- Pi-che-tchai, railway, **78**, **43**.
- Pickles, tariffs, **80**, **23**.
- Piece goods, export, **79**, **42**.
- peau de Béhaine, Bishop, sent to Nguère to evoke assistance for **14**; treaty, 18th century, **78**, **XIV**, 1787, concluded with Louis for Cochin China, 1787, French assistance **78**, **51**, **52**, **79**, **38**; export, **78**, **52**, **81**, **20**; import, **81**, **21**.
- Pine apple plant, **78**, **54**.
- Piracy and plunder, **76**, **48**, **55**, **78**, **79**, **78**, **17**, **21**, **81**, **11**, **20**; British action taken against, 1819, **76**, **44**; increase in, **76**, **46**, **47**, **49**; measures for suppression of, **76**, **41**, **45**, **68**; Persian Gulf, **76**, **45**–**6**, **59** note; temporary cessation, 1806–8, **76**, **44**.
- Pirate Coast, **76**, **43**; change of name to Trucial Oman, 1835, **76**, **44**.
- Pires, Thomé, expedition to Canton river as Ambassador, **81**, **8**; visit to Peking, sent back to Canton, **81**, **8**, death, 1524, **81**, **8**.
- Plague, **76**, **28**, **81**, **3**.
- Plassey, battle of, **77**, **13**.
- Plaster of Paris, **76**, **36**.
- Pnom-deck, iron ore, **78**, **56**.
- Pnom-penh, **78**, **5**, **36**; bank, **78**, **71**; market, **78**, **62**; population, **78**, **10**; projected railway, **78**, **38**, **41**; river traffic, **78**, **36**; roads, **78**, **30**, **32**, **44**; saw mills, **78**, **59**.
- Po-Tao, **78**, **11**.
- Polem, **79**, **1**.
- Political conditions, Persian Gulf region, **76**, **71**–6.
- Pomegranates, **77**, **30**.
- Ponda province, **79**, **1**; agriculture, **79**, **35**, **37**; labour, **79**, **31**–2; mountains, **79**, **3**; population, **79**, **9**; post office, **79**, **28**; road, **79**, **24**, **25**.
- Pondicherry, **77**, **1**, **2**, **3**, **6**, **12**, **22**; administration, **77**, 18–9; area, **77**, **1**, **5**; Brahmanic castes in, **77**, **17**; British Consular Agent, **77**, **15**; captured by Dutch, 1693, **77**, **13**, restored to France, 1697, **77**, **13**; captured by Eyre Coote, 1761, and destroyed, **77**, **13**; Chamber of Commerce established, 1879, **77**, **39**; coasting trade, **77**, **28**; colleges, **77**, 19–20; development, **77**, **14**; exports, **77**, **43**; fortifications erected by French, about 1675–6, **77**, **12**–**13**; French landing at 1674, and trading station established, **77**, **12**–3; Government, conventions, with Madras Government re salt, 1818 and 1837, **77**, **16**, **51**; market, **77**, **39**, **49**; population, **77**, **1** note, 2–3, **5**; projected improvements, **77**, **27**; public library, **77**, **20**; railways, **77**, **22**–**3**, construction, loan for, **77**, **53**, project, **77**, **24**; rebuilding of, **77**, **14**; roads, **77**, **21**, **30**; shipping, **77**, **27**, **28**, accommodation, **77**, **25**; telegraphic system, **77**, **25**; tonnage and foreign trade, **77**, **20**, **40**; trade, **77**, **40**; tribes, **77**, **4**; water supply, loan for improvement, **77**, **42**.
- Pondicherry district, floods in 1884, **77**, **15**.
- Pondicherry Railway Co., **77**, **22**, **23**.
- Ponnaiyar river, **77**, **1**, **3**, **22**, **33**.
- Pontianak, cable connections, **78**, **47**.
- Population, Arabian coastal region, **76**, **30**–2; Chandernagor, **77**, **10**; French India, **77**, **1** note, 2–3, **5**, 6–7; French Indo-China, **78**, 8–9; Head of Persian Gulf, **76**, **33**; Macao, **81**, 4–6; Mahé, **77**, **10**;

Population—*cont.*

- Persian littoral, **76**, **36**; Portuguese India, **79**, **9**; Portuguese Timor, **80**, **4**; Sultanate of Oman, **76**, **31**; Yanaon, **77**, **8**.
- Porcelain, import, **78**, **64**; manufacture, **78**, **57**.
- Port Darwin, **80**, **14**.
- Port Karwar, projected railway, **79**, **28**.
- Ports, French Indo-China, **78**, **44-6**; Macao, **81**, **16-7**; Portuguese India, **79**, **28-30**; Portuguese Timor, **80**, **12-3**.
- Portugal, **80**, **1**, **81**, **4**; agreements with Netherlands, *re* frontiers of Timor, 1854, 1859, 1893, **80**, **7-8**, **8**, **8-9**; attempt to open up communication with China, **81**, **7**; coinage remodelled, 1878, **79**, **48**; contest with Spain, *re* the Moluccas, **80**, **6**; friction with China *re* Macao, **81**, **9-10**, **24**; influence and conquests, in India, history of, **79**, **13-5**, in Persian Gulf, **76**, **64**, **67-8**, in Timor Island, **80**, **6-9**; negotiations with China, 1554, **81**, **8-9**; occupation of Macao, 1557, history, **81**, **7**, **8-9**; possessions, in Eastern Archipelago, **80**, **6**, in Malay Archipelago, **80**, **5**; repudiation of treaty of 1878 *re* trade, **79**, **45**; revolution, 1908, **80**, **10**; rule in Bahrein, 16th century, **76**, **47**; shipping, **80**, **12**, **13**, **14**; trade, **79**, **45**, **46**, **80**, **14**, **21**, **22**, **81**, **8**.
- Portuguese, disappearance from Persian Gulf about 1720, **76**, **59**, **64**; expelled, from Bahrein, 1602, **76**, **47**, from Formosa, 1622, by Dutch, **81**, **10**, from Hong Kong, 1622, by Shah Abbas the Great, **76**, **58**, **67**, from Muscat, 1652, **76**, **58**, **67**; footing obtained in Cambodia, **78**, **13**; Macao, **81**, **4**, **5**; Pondicherry, **77**, **4**; Portuguese India, **79**, **9**, **32**; Portuguese Timor, **80**, **3**.
- Portuguese East Africa, immigration, **79**, **32**; trade, **79**, **42**, **45**, **46**.
- Portuguese India, *see* **79** Contents.
- Portuguese language, **79**, **8**, **20**, **80**, **10**, **81**, **4**, **12**, **13**.
- Portuguese schools, **79**, **20**.
- Portuguese Timor, *see* **80** Contents.
- Postal packages, freedom from customs duty, **77**, **50**.

- Posts, telegraphs, and telephones, French India, **77**, **24-5**; French Indo-China, **78**, **42**; Macao, **81**, **15-6**; Portuguese India, **79**, **28**; Portuguese Timor, **80**, **11-2**.
- Potatoes, **79**, **37**, **80**, **15**.
- Pottery and potteries, **77**, **38**, **57**, **58**, **78**, **58**, **59**, **79**, **42**, **80**, **19**; export, **77**, **38**, **45**; trade, **78**, **61**.
- Poultry, **78**, **52**; export, **78**, **52**.
- Power, **78**, **59**, **79**, **43**.
- Praia d'Areia Preta, the, **81**, **2**.
- Praia Grande, **81**, **2**; shipping, **81**, **17**.
- Preserves, export, **78**, **51**; import, **80**, **22**; tariffs, **80**, **23**; trade, **78**, **61**.
- Prickly heat, **76**, **28**.
- Printing works, **78**, **58**.
- Protestants, Portuguese India, **79**, **17**.
- Provisions, import, freedom from customs duty, **77**, **50**.
- Pualaca, petroleum, **80**, **19**.
- Public works, French India, **77**, **35**.
- Pulo-Condore islands, cable connections, **78**, **47**; ceded to France, by treaty of 1787, **78**, **14-5**.
- Pulse, import, **79**, **29**, **46**.

## Q.

- Quarantine, Arabian coastal region, **76**, **28**.
- Quelim, **79**, **39**.
- Quepem province, **79**, **1**, **load**, **79**, **25**.

## R.

- Races, Arabian coastal region, **76**, **29-30**; Chandernagor, **77**, **10**; French Indo-China, **78**, **7-8**; Head of Persian Gulf, **76**, **32-3**; Macao, **81**, **4**; Mahé, **77**, **9-10**; Persian littoral, **76**, **34-6**; Pondicherry and Karikal, **77**, **4**; Portuguese India, **79**, **7-8**; Portuguese Timor, **80**, **3**; Yanaon, **77**, **8**.
- Rach-gia, rice mills, **78**, **59**.
- Rachol, **79**, **26**.
- Rada, harbour, **81**, **16-7**.
- Radishes, **79**, **37**.
- Railways, French India, **77**, **22-4**; French Indo-China, **78**, **37-42**; Macao, **81**, **15**; Portuguese India, **79**, **27-8**.
- Rajputs, Portuguese India, religion, **79**, **17**.
- Ramas, Cape, **79**, **5**.

- Ramelau, Mount, **80**, 1.  
 Ramie grass, **78**, 51.  
 Ramuz district, **76**, 17.  
 Ras Dibba, **76**, 40, 43.  
 Ras el-Hadd, **76**, 1, 3, 4, 7, 8, 10; climate, **76**, 26.  
 Ras el-Jebel district, **76**, 5, 7, 10; inlets, **76**, 11.  
 Ras al-Kheima, **76**, 43, 80; Sheikh of, **76**, 72, nominally subject to Sharga, **76**, 43.  
 Ras Musandim, **76**, 1, 3, 7, 8.  
 Ras ul-Mutaf, **76**, 19.  
 Ras Sakar, **76**, 39.  
 Ras Tanura, **76**, 10.  
 Rashaida tribe, Arabian coastal region, **76**, 73.  
 Rashed bin Hamid, Chief of Ejman, **76**, 80, 81.  
 Raw silk, export, **78**, 52.  
 Red River (Song-koi), river, **78**, 2, 3, 9, 16, 18, 43, 53; delta, **78**, 4, climate, **78**, 6, French driven to, **78**, 20, roads, **78**, 31; bridge, **78**, 39; navigation, **78**, 43; opened to trade by treaty of 1874, **78**, 17; system, **78**, 4-5, 32-5; trade, **78**, 64; valley, **78**, 30.  
 Reinach, Capt. de, on effect of duties on trade of Laos, **78**, 66.  
 Religion, French India, **77**, 17-8; French Indo-China, **78**, 24-5; Macao, **81**, 12; Persian Gulf region, **76**, 71; Portuguese India, **79**, 16-8; Portuguese Timor, **80**, 10.  
 Resin, **78**, 54.  
 Réunion, immigration, **77**, 29; shipping, **77**, 28.  
 Ribandar, road, **79**, 24; suburb, **79**, 10.  
 Rice, **77**, 27, 31, **78**, 49, 53, **79**, 6, 34, **80**, 15; cultivation, **77**, 6, 32, **78**, 6, 10, 50, **79**, 36, 37, 39, 60, **80**, 15; export, **77**, 44, 47, **78**, 15, 49, 50, 63, **79**, 44, 45, **81**, 21; import, **77**, 32, **79**, 30, **80**, 22, **81**, 20, 21; irrigation for, **76**, 6; liquor distilled from, **77**, 50; mills, **78**, 59, 72, **81**, 18; swamps, **78**, 49; trade, **78**, 61, 62.  
 Rigan, **76**, 24.  
 Rivers, Arabian coastal region, **76**, 11; Chandernagor, **77**, 10, 22; French Indo-China, **78**, 4-6, 32-7; Head of Persian Gulf, **76**, 15-7; Karikal, **77**, 6, 22; Persian littora, **76**, 25-6; Pondicherry, **77**, 3, 121-2; Portuguese India, **79**, 4, 5, 26-7; Portuguese Timor, **80**, 2, 11; Yanaon, **77**, 7.  
 Rivière, Henri, operations in Tongking, **78**, 18; sent with small force to open up Song-koi route, **78**, 18; death, 1883, **78**, 18.  
 Roads, French India, **77**, 21, 54; French Indo-China, **78**, 30-2; obstacles to transport, **78**, 32; Macao, **81**, 15; Portuguese India, **79**, 24-5; Portuguese Timor, **80**, 11.  
 Rochehouart, Comte de, **78**, 17.  
 Roman Catholic Missions, French India, **77**, 17; French Indo-China, **78**, 25; Macao, **81**, 12; Persian Gulf region, **76**, 71, schools, **79**, 20; Portuguese India, **79**, 17, 32.  
 Ropes, **77**, 38; manufacture, **80**, 19.  
 Rotterdamsche Lloyd, **79**, 31, **80**, 13.  
 Royal Dutch Line, **79**, 31.  
 Ruba el-Khali desert, **76**, 4.  
 Ruba el-Khali river, **76**, 7.  
 Rubber, **78**, 50, 51, **79**, 37; cultivation, **80**, 16; export, **78**, 51, 63; import, **77**, 49.  
 Rud-Hilleh river, delta, **76**, 18; system, **76**, 25.  
 Rum, customs duties on, **77**, 50; import, **77**, 49.  
 Rushes, **78**, 51.  
 Russia, agreements and conventions, with Great Britain, 1907, **76**, 66, with Persia, 1889, *re* railway construction in Persia, **76**, 66; alliance with Great Britain, **76**, 59; consulate established at Baghdad, 1881, **76**, 66; interests and intrigues, in Koweit, **76**, 52, in Mohammara, **76**, 56, in Persian Gulf region, **76**, 66; naval demonstrations in Persian Gulf, **76**, 66; plague missions despatched to Southern Persia, **76**, 66; relations with France from 1891, **76**, 65; steam navigation in Persian Gulf, **76**, 68; trade, **77**, 29; wars with Persia between 1804 and 1828, **76**, 58.  
 Russian Steam Navigation and Trading Co., foundation, 1900, **76**, 66.  
 Ryswyck, Treaty of, 1697, **77**, 13.

## S.

Sabians, Head of Persian Gulf, **76**, 33.

- Sacks, trade, **78**, 61.
- Sadek, lines of communication, **78**, 30; market, **78**, 62; population, **78**, 10.
- Saeed bin Butye, Chief of Debay, **78**, 81.
- Saeed bin Tahnoon, Chief of the Benujas, **78**, 81.
- Safwan, Turkish military post established at, 1902, **78**, 53.
- Sago, **77**, 31, 33; cultivation, **77**, 33; palm, **77**, 33.
- Sahyadri Mountains, *see* Ghats, Western.
- Said bin Sultan, *see* Seyyid Said.
- Saigon, **78**, 27; arrival of reinforcements at, 1861, **78**, 15; banks, **78**, 62, 71; cable connections, **78**, 47; Chamber of Commerce at, **78**, 62; coastal service, **78**, 47; factories, &c., **78**, 58-9; growth, **78**, 10; lines of communication, **78**, 30; market, **78**, 62; population, **78**, 9-10; port, **78**, 4, 5, description, **78**, 44, 45, trade, **78**, 66; power station, **78**, 59; railways, **78**, 38, 39, projects, **78**, 38, 41; rice mills, **78**, 59; roads, **78**, 30, 31, 32; shipping, **78**, 46, 64; steamer service, **78**, 46; storming of, by Franco-Spanish fleet, 1858, **78**, 15; trade, **78**, 47, 55; tramways, **78**, 40.
- Saigon river, **78**, 5, 45; traffic, **78**, 36, returns, **78**, 37.
- Saigon-My-tho Railway, economic needs, **78**, 41; finance, **78**, 40; projected reconstruction, **78**, 38.
- Sail-making industry, **76**, 31.
- Sailcloth, **77**, 38.
- S. Domingos, market, **81**, 19.
- St. George islands, area, **79**, 5.
- Saint-Hilaire, M. Barthélemy, **78**, 18.
- St. John island, *see* Macarira.
- St. Joseph of Cluny, Sisters of, **77**, 38.
- St. Petersburg, British Ambassador at, **76**, 69.
- S. Thiago, fort, **81**, 2.
- St. Thomé, **77**, 12.
- Sal river, **79**, 4, 11, 26; valley, **79**, 6.
- Salsette province, **79**, 1, 10, 11; obtained by Portugal, 1543, **79**, 13; population, **79**, 9; salt works, **79**, 41; sanitary conditions, **79**, 7.
- Salt, **76**, 5, 25, **77**, 6, 16, 50, 51, **78**, 59, **79**, 41-2; export, **79**, 29, 30, 41, 45; French manufacture of, forbidden, by Conventions of 1818 and 1837, **77**, 16, 51; import, **77**, 51; trade, **78**, 61, 62, **81**, 22; traffic forbidden, **78**, 66; Treaty provisions *re*, 1839, **77**, 16.
- Salt fish, export, **77**, 44, **78**, 51, 55, **79**, 30.
- Salt of magnesia, import, **77**, 49.
- Saltpetre, **77**, 50, 51; export, **77**, 16; import, **81**, 21; traffic forbidden, **78**, 66.
- Sambor-Sambok, rapids, **78**, 36.
- Same, military headquarters, **80**, 20.
- Sampans, **78**, 36.
- Samshu, manufacture, **81**, 18.
- Sand, trade, **78**, 61.
- Sandal-root, export, **80**, 20, 21.
- Sandalcalo river, *see* Damanganga.
- Sandals, manufacture, **79**, 42-3.
- Sandalwood, **80**, 5, 17; export, **80**, 20, 21, duty, **80**, 24.
- Sandomil, Count of, on question of abandonment of Goa, **79**, 14.
- Sandstone, **76**, 4, 16, **79**, 5.
- Sanguem province, **79**, 1; agriculture, **79**, 35; emigration, **79**, 32; locust and mosquito plagues, **79**, 39; population, **79**, 9; road, **79**, 25.
- Sanitary conditions, Arabian coastal region, **76**, 28-9; French Indo-China, **78**, 7; Macao, **81**, 3; Pondicherry and Karikal, **77**, 4, 6; Portuguese India, **79**, 7; Portuguese Timor, **80**, 3.
- Sanquelim province, **79**, 1; projected reservoir, **79**, 39; road, **79**, 24.
- Sanskrit, **77**, 20, **78**, 13.
- Sanvordem, railway station, **79**, 27; road, **79**, 25; steamer service, **79**, 26.
- São Lourenço, fort, **79**, 26; road, **79**, 25.
- Sarbaz, road, **76**, 24.
- Sarbaz river, **76**, 24.
- Satari, agriculture, **79**, 36, 37; birth-rate, **79**, 10; forests, **79**, 34; minerals, **79**, 41; plateau, **79**, 3; population, **79**, 9, 12; road, **79**, 24; Sudra caste, **79**, 16.
- Satari district, **79**, 2.
- Satvara, road, **79**, 25.
- Savanakhet, copper, **78**, 57; market, **78**, 62; projected railway, **78**, 42.
- Savant Vadi, **79**, 1.
- Saw mills, **78**, 58, 59.

Sea-cucumber, **80**, **19**.  
 Sea fisheries, **76**, **31**, **36**.  
 Se-moun river, **78**, **5**, **36**, **44**.  
 Seine, **77**, **2**.  
 Semail Wadi, **76**, **7**; cultivation, **76**, **8**; villages, **76**, **30**.  
 Semail Wadi valley, agriculture, **76**, **32**; population, **76**, **32**.  
 Senegal, **77**, **37**.  
 Senez, Captain, sent to Tongking, to open it to French trade, **78**, **16**.  
 Sericulture, **78**, **52**.  
 Sesame, **77**, **31**, **78**, **50**, **51**.  
 Seyyid Said (Said bin Sultan), Sultan of Muscat, Kuria Muria islands ceded to Great Britain, **1854**, **76**, **41**; treaties concluded with France, **1807**, **1808**, **76**, **40-1**; death, **1856**, dispute over dominions, **76**, **41**.  
 Seyyid Taimur, Sultan of Oman, accession to throne, **1913**, reign, **76**, **43**.  
 Sha'am, *see* Shuam.  
 Shakabout, Sheikh of Aboo Dhebbec, **76**, **80**.  
 Shamil, leased to Sultan of Muscat, **1794**, **76**, **58**.  
 Shammar tribe, Persian littoral, **76**, **34**.  
 Shanghai, French squadron at, **79**, **19**; steamer service, **78**, **46**.  
 Sharga, population, **76**, **31**; Sheikh of, **76**, **72**, **80**, **81**; dominions, **76**, **40**, independence, **76**, **43**, native concession to Germany cancelled by, **76**, **67**, protest against hoisting of Persian flag on Siri island, **1887**, **76**, **61**.  
 Shatt el-Arab river, **76**, **1**, **3**, **12**, **13**, **14**, **16**, **17**, **20**, **54**, **73**; cholera on, **76**, **28**; cultivation, **76**, **12**, **56**; navigation, difficulties, **76**, **15**; piracy, **76**, **55**; system, **76**, **15**; tribes on, **76**, **33-4**.  
 Sheep, **76**, **32**, **77**, **32**, **78**, **51**, **52**, **79**, **38**.  
 Sheikh Shuaib island, **76**, **24**.  
 Shepherd's Co., shipping lines, **79**, **31**.  
 Shiah Mohammedans, in Arabian coastal region, **76**, **29**, **34**; Persian Gulf region, **76**, **71**.  
 Shibkuh, coast, **76**, **19**.  
 Shibkuh district, tribes, **76**, **35**.  
 Shiism, tribes, **76**, **29**.  
 Shipping Lines, French India, **77**, **26-7**, **27**; French Indo-China, **78**, **46-7**; Macao, **81**, **17**; Portuguese India, **79**, **31**; Portuguese Timor, **80**, **13-4**.

Shiraz, **76**, **17**, **22**, **25**; caravan route, **76**, **20**; road, **76**, **22**, **23**, project, **76**, **23**.  
 Shuam (Sha'am), **76**, **43**.  
 Shustar, **76**, **16**.  
 Si-kiang (West) river, **78**, **2-3**, **30**, **42**; piracy, **81**, **20**.  
 Siam, **78**, **1**, **2**, **5**, **14**, **36**; acquisition of provinces in Cambodia, 18th century, **78**, **14**; French relations and disputes with, **78**, **21-2**; frontier, railways, **78**, **41**, road, **78**, **32**; importance of, **78**, **29**; influence in Cambodia, **78**, **15**; lines of communication, **78**, **42**, **44**; railways, **78**, **38**; shipping, **78**, **46**; Thai races of, **78**, **13**; trade, **78**, **46**, **55**, **64**; treaties with France, **1867**, **1893**, **1904**, **1907**, **78**, **16**, **21-2**, **23**.  
 Siam, Gulf of, **78**, **1**, **5**; coastal service, **78**, **47**.  
 Sidnato, mountains, **79**, **3**.  
 Siemrap province, **78**, **21**; annexed by Siam, 18th century, **78**, **14**; ceded to France, **1907**, **78**, **23**; Siamese troops withdrawn from, **1893**, **78**, **22**.  
 Silk, **77**, **38**; culture, development, **78**, **58**; export, **78**, **63**; export and import duties, **80**, **23**; goods, import, **78**, **64**, **65**, **81**, **21**; spinning, **78**, **58**; tissues, trade, **78**, **61**; trade, **78**, **61**, **81**, **18**; worms, **78**, **51**.  
 Silvassa, *see* Paço d'Arcos.  
 Silver coinage, **78**, **48**, **49**, **71**.  
 Simbor, fort, **79**, **2**, population, **79**, **12**.  
 Sind, **76**, **2**; tribes, **76**, **35**.  
 Singapore, cable connections, **78**, **47**; religion, **81**, **12**; river traffic, **78**, **36**; shipping, **77**, **28**, **78**, **46**, **81**, **17**; trade, **77**, **38**, **78**, **46**, **55**, **63**.  
 Siri Island, Persian flag hoisted on, **1887**, **76**, **61**.  
 Sisophon, ceded to France, **1907**, **78**, **23**; road, **78**, **32**, **44**.  
 Sivaists, French India, **77**, **17**.  
 Slavery and slave trade, **76**, **42**, **48**, **68**, **75**, **78**, **19**; forbidden, **76**, **79**; treaties for suppression of, **1838**, **1839**, **1847**, **1851**, **1856**, **1873**, **76**, **41**, **44**, **61**.  
 Small pox, **76**, **28**, **78**, **7**, **79**, **7**.  
 Smuggling, suppression, **77**, **51**.  
 Smyrna, trade, **76**, **52**.  
 Snuff, customs duties on, **77**, **50**.  
 Soaps, **77**, **38**; factory, **78**, **58**.

Société de construction des chemins de fer de l'Indo-Chine, La, **87**, 40.  
 Sohar, **76**, 1 note, population, **76**, 32; tribes, **76**, 30.  
 Solor island, administration, **80**, 10; ceded to Holland, 1854, **80**, 7-8; Portuguese expedition to, **80**, 6.  
 Solor Channel, **80**, 6.  
 Son-tai, captured by French, 1883, **78**, 19; market, **78**, 61.  
 Sonaulim river, viaduct, **79**, 27.  
 Song-ka river, **78**, 35, 45; irrigation, **78**, 53.  
 Song-ngo Bay, **78**, 37.  
 Song-thuong river, **78**, 53.  
 Songkoi river, *see* Red river.  
 Soubada, schools, **80**, 10.  
 South Arcot (British district), **77**, 15.  
 South Indian Railway Co., **77**, 22, 23.  
 Southern Mahratta, railway system, **79**, 27.  
 Souttoukeny Canal, constructed 1833, **77**, 22.  
 Souttoukeny Lagoon, **77**, 22.  
 Souza, Lionel de, negotiations with China, 1554, **81**, 8-9.  
 Spain, contest with Portugal *re* the Moluccas, **80**, 6; treaty with King Tu-duc, 1862, **78**, 15.  
 Spanish blood, **81**, 4.  
 Spanish missionaries, Tongking, **78**, 25.  
 Spanish Transatlantic Co., **79**, 31.  
 Spelter, traffic forbidden, **78**, 66.  
 Spices, **77**, 31; export, **79**, 30.  
 Stag horn, export, **80**, 21.  
 Stamps and stamp paper, import, **79**, 46.  
 Standard Oil Co., **77**, 38, 39, 48, **78**, 62.  
 Star anise, export, **78**, 63.  
 Stone, **79**, 41.  
 Stoomvaart Maatschappij Nederland, **80**, 13, **81**, 17.  
 Straits Settlements, **70**, 17; shipping, **77**, 28, **78**, 46; trade, **77**, 38, 44, 45.  
 Strick Line, **79**, 31.  
 Stung-treng Reach **78**, 36; occupied by France, 1893, **78**, 21.  
 Su, Marshal, agreements with French *re* suppression of piracy, **78**, 21.  
 Suai, anchorage, **80**, 13; petroleum, **80**, 19.  
 Sudras, French India, **77**, 17; Mahé, **77**, 10; Portuguese India, **79**, 16; Yanaon, **77**, 8.

Sugar, cultivation, **77**, 32, **79**, 37, 42, **80**, 19; cane, **77**, 31, **78**, 50, **79**, 42, **80**, 15, 19, export, **78**, 50, liquor distilled from, **77**, 50; export, **78**, 63, **81**, 21, duty, **78**, 65; import, **78**, 30, 37, 46, 64, 65, **81**, 21; refining, **78**, 59; trade, **78**, 61.  
 Suggar, Sultan bin, Chief of the Joamees and of Shargah, **76**, 80, 81.  
 Suleman bin Ahmed, Sheikh, **76**, 80.  
 Sulphur, **76**, 18, **80**, 19; traffic forbidden, **78**, 66.  
 Sunni sect, **76**, 73; Persian Gulf region, **76**, 71.  
 Sur, caravan route, **76**, 32; development of, **76**, 11; igneous rocks, **76**, 7; population, **76**, 32.  
 Surabaya, **80**, 14; shipping, **80**, 13.  
 Surat, **77**, 2.  
 Suro, schools, **80**, 10.  
 Susa, arrival in Persian Gulf, 1885, **76**, 62.  
 Sweden, shipping, **79**, 29.  
 Sydney, trade, **80**, 14.  
 Synthetic indigo, import, **77**, 49.  
 Sze-chwan, projected railway, **78**, 42, 43-4; tribe from, **78**, 8.  
 Sze-mao, port, road, **78**, 43.

## T.

Tahakai, ceded to Holland, 1914, **80**, 9.  
 Tai-binh, bridge, **78**, 39.  
 Taipa island, **81**, 1, 2; administration, **81**, 12; education, **81**, 13; fishing industry, **81**, 19; occupied by Portugal, 1846, **81**, 11; population, **81**, 4, 5, 6; projected breakwater, **81**, 16; telegraphic and telephonic communications, **81**, 15-6.  
 Taipa Bay, **81**, 2; shipping, **81**, 17.  
 Taiping rebels, **78**, 16.  
 Talas river, **80**, 1.  
 Talpona river, **79**, 4, 26.  
 Tam-bak, bridge, **78**, 39.  
 Tamão island, landing at, 1517, **81**, 8.  
 Tamarinds, **77**, 30; export, **77**, 46.  
 Tamil language, **77**, 4, 9.  
 Tamil tribe, Pondicherry and Karikal, **77**, 4.  
 Tamima (chief), Oman, **76**, 73.  
 Tamiroe Ailala, ceded to Holland, 1914, **80**, 9.

- Tamtsai, population, **81**, 6; ship-ping, **81**, 17.
- Tan-hai island, **78**, 11.
- Tang-ho, **78**, 5.
- Tang-i-Zagh pass, **76**, 23.
- Tang-i-Zintan pass, **76**, 23.
- Tangistan, coast, **76**, 19.
- Tanjore, **77**, 7; ground nuts, **77**, 43.
- Tanjore district, **77**, 1, 17; railway, **77**, 7.
- Tanneries, **77**, 37, **78**, 58, 59.
- Tannin, export, **77**, 46.
- Tay-ninh, road, **78**, 32.
- Tea, cultivation, **78**, 49-50, **80**, 15, 16; export, **78**, 43, 50, 63, **81**, 18, 21, duty, **78**, 65; import, **78**, 64, **81**, 21; trade, **78**, 61, **81**, 18.
- Teak, uses, **79**, 34.
- Teheran, **76**, 62; British Minister at, **76**, 56, authorised to give Sheikh of Mohammera assurances of British protection, **76**, 56-7; Russian influence in, **76**, 66.
- Telegraphic communication, French Indo-China, **78**, 47; Macao, **81**, 18; Persia, **76**, 61; Persian Gulf region, **76**, 54; Persian Makran, **76**, 63; Portuguese India, **79**, 31; Portuguese Timor, **80**, 14.
- Telegu language, **77**, 8.
- Telegu tribe, Yanaon, **77**, 8.
- Telles, Silva, **79**, 3.
- Tellicherry, **77**, 8; road, **77**, 21.
- Terekhol river, **79**, 1; navigation, **79**, 27; system, **79**, 26.
- Tetum language, **80**, 3.
- Textiles, export and import duties, **80**, 23; import, **80**, 22; manufacture, **78**, 58.
- Thai-binh, manufactures, **78**, 58; port, **78**, 4.
- Thai-binh river, system, **78**, 34.
- Thai-nguyen province, minerals, **78**, 55, 56.
- Thai tribe, **78**, 7-8, 13.
- Thana district, **79**, 2.
- Thanh-hoa, market, **78**, 61; projected fall in Canal Principal to generate electric power, **78**, 59.
- That-ke province, **78**, 2.
- Thomson, M., Governor of Indo-China, convention with King Norodom, 1863, **78**, 19.
- Thread, import, **78**, 64; trade, **78**, 61.
- Tiarlelo, sulphur, **80**, 19.
- Tibba, **76**, 40.
- Tibet, **78**, 5; emigration, **78**, 7; tribes from, **78**, 7.
- Tien-cha peninsula, **78**, 45.
- Tien-kang river, *see* Upper Branch.
- Tien-yen Bay, **78**, 3.
- Tientsin, treaty executed at, between France and China, 1885, **78**, 20, 66.
- Tigris river, **76**, 2, 15, 16, 17; system, **76**, 15-6.
- Tile and brick works, **78**, 58-9, **79**, 42; trade, **78**, 61.
- Timber, **77**, 30, **78**, 54, 59, **79**, 34; export, **81**, 21; import, **81**, 21.
- Timor island, **80**, 1; administration, **79**, 19; Macao formed into province with, 1833, **81**, 10, separated, 1896, **81**, 10, 22; religion, **81**, 12.
- Tin, **78**, 43, 56.
- Tindivanam, roads, **77**, 21.
- Tinem Ghat, road, **79**, 24.
- Tinnevely, cotton, **77**, 27.
- Tippera, **77**, 2.
- Tirnoular, population, **77**, 6-7.
- Tiroubouvane, population, **77**, 5.
- Tiroumalajaran river, **77**, 26.
- Tiroupapouliour, construction of railway at, loan for, **77**, 51-3.
- Tissuadi, *see* Goa.
- Tivim river, **79**, 26; projected canal, **79**, 27.
- Tobacco, cultivation, **77**, 31, 32, **78**, 50, **79**, 36, 37, **80**, 15, 16, **81**, 21; customs duties on, **77**, 50, **80**, 23; factories, **78**, 58, **81**, 18; import, **79**, 64, **79**, 29, 30, 46, **80**, 22, **81**, 21; trade, **78**, 61.
- Tongking, **78**, 1, 2, 3; administration, **78**, 25, 26, 27; agriculture, **78**, 49, 50, 51; area, **78**, 1; bridges, **78**, 39; calcareous deposits, **78**, 57; climate, **78**, 6, 7, 11; coast, **78**, 3-4, piracy, **78**, 17, salt, **78**, 59; commercial relations with China, established, 1887, **78**, 20; conquest of, by France, history, **78**, 18-9; delta, irrigation, **78**, 53; disturbances in, **78**, 29; education, **78**, 28; evacuated by China, 1884, **78**, 19; factories, **78**, 58; finance, **78**, 67, 69; forests, **78**, 53-4; French interests and penetration in, **78**, 16-7, 20-1; French protectorate extended, 1884, **78**, 19; horse-breeding, **78**, 52; livestock, **78**, 52; manufactures, **78**, 58; markets, **78**, 61; minerals, **78**,



Tongking—*cont.*

49, 55, 56, 57, concessions, **78**, 55; navigable waterways, **78**, 33; permanent bridging at, **78**, 32; population, **78**, 9; port, shipping, **78**, 47; power stations, **78**, 59; railways, **78**, 37, project, **78**, 42; revolt in, against Tu-duc, **78**, 15; roads, **78**, 31, 42, 43; rulers of, **78**, 14; silk worms, **78**, 51; Spanish missionaries in, **78**, 25; steamer service, **78**, 47; towns, **78**, 9; trade, **78**, 66; tribes, **78**, 7-8; Trinh family in power, **78**, 14; united to Annam, 1801, **78**, 16; upper, *see that title*; withdrawal of French troops from, **78**, 18.

Tongking, Gulf of, fishing, **78**, 55.

Tonle-sap, *see* Great Lake.

Topas, Pondicherry, **77**, 4.

Tortoise shell, **77**, 38.

Tourane, **78**, 9; bank, **78**, 71; cable connections, **78**, 47; capture of town by Franco-Spanish fleet, 1858, **78**, 15; ceded to France by treaty of 1787, **78**, 14-5; coastal service, **78**, 47; harbour, **78**, 45; market, **78**, 61; port, **78**, 9; railway, **78**, 38, project, **78**, 39; tramways, **78**, 40; United Chamber of Commerce and Agriculture at, **78**, 62; viaducts, **78**, 39; wireless station, **78**, 47.

Tourane river, **78**, 45, 56.

Toys, **77**, 38.

Tramways, French Indo-China, **78**, 39-40.

Tran-ninh plateau, **78**, 3.

Trang-ga, zinc, **78**, 57.

Tranquebar, **77**, 1.

Trees, **76**, 19, **79**, 34.

Trinh family in Tongking, power, **78**, 14.

Trucial Oman, **76**, 3, 4, 5-6, 6, 10, 11, **76**; *see also* **76** Contents; coast, **76**, 7; emigration, **76**, 35; fertility, **76**, 6-7; foreign intrigues in, **76**, 44; history, &c., **76**, 43-5; population, **76**, 30; Sheiks of, agreements with Great Britain, 1892, 1902, **76**, 44-5, 45, 68, position of, **76**, 72, relations with Great Britain, **76**, 46; trade, **76**, 21, 36.

Tsêng, Marquis, information *re* China's non-acceptance of treaty of 1874, **78**, 18.

Tsinshan, road, **81**, 18; telegraph office, **81**, 16.

Tso-kiang river, **78**, 42, 43; traffic, **78**, 42-3.

Tu-duc, King of Cochin China, **78**, 19; reign, **78**, 15; revolt against, in Tongking, **78**, 15; treaty with France and Spain, 1862, **78**, 15.

Tuberculosis, **79**, 7.

Tui-mien Shan, *see* Lappa.

Tungsten, **78**, 56-7.

Turkey, agreements with Great Britain, 1913, **76**, 47, 53; boundary between Persia and, **76**, 54; claims, to sovereignty over Arabia, 1874, **76**, 46, to sovereignty over El-Katr, **76**, 46, renounced by Convention of 1913, **76**, 47, to Mohammera, **76**, 55; construction of fortifications, 1886, opposition to and suspension, **76**, 54; designs in Koweit, **76**, 52; expeditions, to Hasa under Midhat Pasha, 1871, **76**, 44, effect on situation in El-Katr, **76**, 46, against Kaab tribes in Arabistan, **76**, 55; garrison established at Doha (El-Bidaa), 1874, **76**, 46; interests and influence, in Arabian coastal region, **76**, 28, in Bahrein, **76**, 47, 48, in Irak, **76**, 53-4, in Koweit, **76**, 52-3, in Persian Gulf, **76**, 70, in Trucial Oman, **76**, 44; negotiations with Great Britain, 1912-4, *re* affairs in Persian Gulf, **76**, 70; occupation of Hasa, **76**, 50; officials in Koweit, trouble with British, **76**, 52; quarantine in, **76**, 28; relations with Germany, **76**, 67; telegraph lines, Persian Gulf region, **76**, 54; war with, **76**, 76.

Turkish blood, Persian littoral, **76**, 35.

Turks, capture and plunder of Mohammera, 1837, **76**, 55; expulsion from shores of Persian Gulf, **76**, 75.

Tuyen-kwang, **78**, 34; zinc, **78**, 57.

Typhoons, **81**, 3.

## U.

Ubon, **78**, 36, 44.

Ugeum, **79**, 26.

Umm al-Kawein, Sheikh, **76**, 43, 80, 81.

Umm Kasr, Turkish military post established at, 1902, **76**, 53.

United States of America, agreement with Muscat, 1833, **76**, 41; financial crisis, 1907, **77**, 45-6; shipping, **78**, 46; trade, **77**, 49, **78**, 64, 65.

Upper Branch (Tien-kang) river, **78**, 36-7.  
 Upper Burma, tribes from, **78**, 7.  
 Upper Kwei-chow, tribe from, **78**, 8.  
 Upper Laos, **78**, 2, 5, 10; agriculture, **78**, 50; mountains, **78**, 3; path, **78**, 43.  
 Upper Tongking, stock rearing, **78**, 51.  
 Upper Yun-nan, tribe from, **78**, 8.  
 Usão, **79**, 26; road, **79**, 24.  
 Utubi Arabs, conquest of Bahrein, 1783, **76**, 45, 47; Persian Gulf region, **76**, 52.

## V.

Vagchora, road needed, **79**, 25.  
 Vaiko river, **78**, 5, 37.  
 Vaisya tribe, Portuguese India, **79**, 16; Yanaon, **77**, 8.  
 Valentia, Lord, on prosperity of Pondicherry, **77**, 14.  
 Valudavour, road, **77**, 21.  
 Vanilla, cultivation, **77**, 33; export duty, **78**, 65.  
 Vansda, road needed, **79**, 25.  
 Vapi, road, **79**, 25.  
 Varacunda, road, **79**, 25.  
 Vasco de Gama, railway station, **79**, 27.  
 Vegetables, cultivation, **77**, 31, 32, **78**, 51; oil, **78**, 50; products, import, **77**, 49; trade, **78**, 61.  
 Velim, road, **79**, 24.  
 Vernassa, road, **80**, 11.  
 Veniaga island, **81**, 8.  
 Venilale, road, **80**, 11.  
 Ventano, anchorage, **80**, 13.  
 Versailles, treaty concluded at, 1787, *re* French assistance for Cochin China, **78**, 14-5.  
 Vetches, **77**, 31.  
 Vettar river, **77**, 6.  
 Victoria, **80**, 6.  
 Vien-tiane, **78**, 5, 35; copper, **78**, 57; market, **78**, 62; population, **78**, 10.  
 Vietry, **78**, 5, 34.  
 Village communities, Portuguese India, **79**, 20-3.  
 Villenour, **77**, 1, 22; canal, made in 1828-9, description, **77**, 22; population, **77**, 5; roads, **77**, 21, 30.  
 Villupuram, railway, **77**, 22.  
 Vines, **76**, 19.  
 Vinh, market, **78**, 61; railway, **78**, 38.  
 Vinh-long, market, **78**, 62; population, **78**, 10; projected railway, **78**, 38.  
 Viqueque, schools, **80**, 10.  
 Volvota river, **79**, 26.

## W.

Wadi el-Miya, depression, **76**, 6.  
 Wahabi Emir, power of Beni Khalid Sheikhs broken by, 1795, in Hasa, **76**, 48-9.  
 Wahabi tribe, aggression in Bahrein, **76**, 47, 50; in Arabia, piracy, **76**, 44; conquest of Hasa province, 1795, **76**, 49; declaration signed by envoy, 1866, *re* British subjects in territories under their authority, **76**, 50; garrisons in Bahrein, expulsion, 1811, **76**, 47; growth of power, and conquests of, **76**, 48-9; influence in Hasa province, **76**, 49-50; intrigues in El Katr, 19th century, **76**, 46; Koweit, **76**, 52; Muscat, raids against, **76**, 41; Oman, **76**, 73; Persian Gulf region, **76**, 71.  
 Wahabism, foundation of sect, 1742, by Abdul Wahab (or son), **76**, 48-9.  
 Wallut, port, harbour, **78**, 56.  
 Wanchai, plague hospital, **81**, 3.  
 Wang-nam, *see* Fai-fo.  
 Warba Island, **76**, 53 note.  
 Water power, **78**, 59.  
 Watson, Admiral, capture of Chandernagor, **77**, 13.  
 Wax, export, **80**, 17, duty, **80**, 24.  
 Weaving, **78**, 57-8, 58, **79**, 42, 43.  
 Wellesley, Lord, refusal to hand over French possessions in India, **77**, 14 note.  
 West of India Portuguese Railway, **79**, 11, 28-9.  
 West river, *see* Si-kiang.  
 Wheat, **79**, 37.  
 White ants, **77**, 32.  
 White pepper, **77**, 31.  
 White Town, area, **77**, 5.  
 Wines and spirits, **77**, 31; duties, **77**, 37, **80**, 23; import, **77**, 48, 49, **78**, 64, **79**, 30, 46, **80**, 22, **81**, 21; tariffs, **80**, 23; trade, **77**, 47, **78**, 61.

Wireless communication, **76**, 68-9;  
French Indo-China, **78**, 47; Macao, **81**, 18; Persian Gulf region, **76**, 54.

Wonekhaus, Messrs., establishment in Persian Gulf region, **76**, 67.

Wongkam, **81**, 1; northern part claimed by Portugal, **81**, 11.

Woods and wooden manufactures, **78**, 54, 58; trade, **78**, 61.

## X.

Xavier, St. Francis, **79**, 14 note; shrine, **79**, 10.

## Y.

Yamani tribe. Arabian coastal region, **76**, 29; Oman, **76**, 72.

Yams, **79**, 37.

Yanaon, **77**, 1; acquired by France, 1750-2, **77**, 13; administration, **77**, 18-9; area, **77**, 2; enclave, description, **77**, 7; laid waste by hurricane and inundation from sea, 1837, **77**, 14-5; market, **77**, 39; population, **77**, 1 note; roads, **77**, 21; schools, **77**, 20.

Yangtse, the, projected railway, **78**, 42.

Yen-bai, **78**, 4, 33, 34.

Yen-the, iron ore, **78**, 56.

Yezd, caravan and trade routes, **76**, 20, 21, 23.

Yokohama, steamer service, **78**, 46; trade, **80**, 14.

Yongdea, *see* Jugdea.

Yun-nan province, **78**, 1, 4, 5, 16, 18, 29, 30, 33; lines of communication, **78**, 42, 43-4; mountains, **78**, 2; port, trade, **78**, 66; section, bridges, **78**, 39; trade, **78**, 63, 64, 65; tribes from, **78**, 7; upper, *see that title*.

Yun-nan-fu, **78**, 44; railways, **78**, 38, 43, projected extension, **78**, 38, 42; road, **78**, 43.

## Z.

Zabara, **76**, 45; hostile fleet captured and destroyed by British naval forces, 1905, **76**, 48.

Zaid bin Syf, **76**, 80.

Zanzibar under power of Sultan of Muscat, till 1794, **76**, 40; independence recognised from Muscat, but annual subsidy levied, **76**, 41; Sultan, agreement with Great Britain, 1873, *re* payment of subsidy to Muscat, **76**, 41.

Zebu bull, **78**, 51; horns, **77**, 38.

Zephyr fabric, export, **77**, 38.

Zinc, **78**, 57; export, **78**, 63.

Zobeir, Khor, **76**, 3, 12, 54; system, **76**, 13.

Zuari river, *see* Juari.

Zvar, **76**, 80.









Tamtsai, population, **81**, 6; ship-ping, **81**, 17.  
 Tan-hai island, **78**, 11.  
 Tang-ho, **78**, 5.  
 Tang-i-Zagh pass, **76**, 23.  
 Tang-i-Zindan pass, **76**, 23.  
 Tangistan, coast, **78**, 19.  
 Tanjore, **77**, 7; ground nuts, **77**, 43.  
 Tanjore district, **77**, 1, 17; railway, **77**, 7.  
 Tanneries, **77**, 37, **78**, 58, 59.  
 Tannin, export, **77**, 46.  
 Tay-ninh, road, **78**, 32.  
 Tea, cultivation, **78**, 49-50, **80**, 15, 16; export, **78**, 43, 50, 63, **81**, 18, 21, duty, **78**, 65; import, **78**, 64, **81**, 21; trade, **78**, 61, **81**, 18.  
 Teak, uses, **79**, 34.  
 Teheran, **73**, 62; British Minister at, **78**, 56, authorised to give Sheikh of Mohammera assurances of British protection, **76**, 56-7; Russian influence in, **78**, 66.  
 Telegraphic communication, French Indo-China, **78**, 47; Macao, **81**, 18; Persia, **78**, 61; Persian Gulf region, **78**, 54; Persian Makran, **76**, 63; Portuguese India, **79**, 31; Portuguese Timor, **80**, 14.  
 Telegu language, **77**, 8.  
 Telegu tribe, Yanaon, **77**, 8.  
 Telles, Silva, **79**, 3.  
 Tellicherry, **77**, 8; road, **77**, 21.  
 Terekhol river, **79**, 1; navigation, **79**, 27; system, **79**, 26.  
 Tetum language, **80**, 3.  
 Textiles, export and import duties, **80**, 23; import, **80**, 22; manufacture, **78**, 58.  
 Thai-binh, manufactures, **78**, 58; port, **78**, 4.  
 Thai-binh river, system, **78**, 34.  
 Thai-nguyen province, minerals, **78**, 55, 56.  
 Thai tribe, **78**, 7-8, 13.  
 Thana district, **79**, 2.  
 Thanh-hoa, market, **78**, 61; projected fall in Canal Principal to generate electric power, **78**, 59.  
 That-ke province, **78**, 2.  
 Thomson, M., Governor of Indo-China, convention with King Norodom, 1863, **78**, 19.  
 Thread, import, **78**, 64; trade, **78**, 61.

Tiarlelo, sulphur, **80**, 19.  
 Tibba, **76**, 40.  
 Tibet, **78**, 5; emigration, **78**, 7; tribes from, **78**, 7.  
 Tien-cha peninsula, **78**, 45.  
 Tien-kang river, *see* Upper Branch.  
 Tien-yen Bay, **78**, 3.  
 Tientsin, treaty executed at, between France and China, 1885, **78**, 20, 66.  
 Tigris river, **76**, 2, 15, 16, 17; system, **76**, 15-6.  
 Tile and brick works, **78**, 58-9, **79**, 42; trade, **78**, 61.  
 Timber, **77**, 30, **78**, 54, 59, **79**, 34; export, **81**, 21; import, **81**, 21.  
 Timor island, **80**, 1; administration, **79**, 19; Macao formed into province with, 1833, **81**, 10, separated, 1896, **81**, 10, 22; religion, **81**, 12.  
 Tin, **78**, 43, 56.  
 Tindivanam, roads, **77**, 21.  
 Tinem Ghat, road, **79**, 24.  
 Tinnevely, cotton, **77**, 27.  
 Tippura, **77**, 2.  
 Tirnoular, population, **77**, 6-7.  
 Tiroubouvane, population, **77**, 5.  
 Tiroumalarajanar river, **77**, 26.  
 Tiroupapouliour, construction of railway at, loan for, **77**, 51-3.  
 Tissuadi, *see* Goa.  
 Tivim river, **79**, 26; projected canal, **79**, 27.  
 Tobacco, cultivation, **77**, 31, 32, **78**, 50, **79**, 36, 37, **80**, 15, 16, **81**, 21; customs duties on, **77**, 50, **80**, 23; factories, **78**, 58, **81**, 18; import, **78**, 64, **79**, 29, 30, 46, **80**, 22, **81**, 21; trade, **78**, 61.  
 Tongking, **78**, 1, 2, 3; administration, **78**, 25, 26, 27; agriculture, **78**, 49, 50, 51; area, **78**, 1; bridges, **78**, 39; calcareous deposits, **78**, 57; climate, **78**, 6, 7, 11; coast, **78**, 3-4, piracy, **78**, 17, salt, **78**, 59; commercial relations with China, established, 1887, **78**, 20; conquest of, by France, history, **78**, 18-9; delta, irrigation, **78**, 53; disturbances in, **78**, 29; education, **78**, 28; evacuated by China, 1884, **78**, 19; factories, **78**, 58; finance, **78**, 67, 69; forests, **78**, 53-4; French interests and penetration in, **78**, 16-7, 20-1; French protectorate extended, 1884, **78**, 19; horse-breeding, **78**, 52; livestock, **78**, 52; manufactures, **78**, 58; markets, **78**, 61; minerals, **78**,



Tongking—*cont.*

- 49, 55, 56, 57, concessions, **78**, 55; navigable waterways, **78**, 33; permanent bridging at, **78**, 32; population, **78**, 9; port, shipping, **78**, 47; power stations, **78**, 59; railways, **78**, 37, project, **78**, 42; revolt in, against Tu-duc, **78**, 15; roads, **78**, 31, 42, 43; rulers of, **78**, 14; silk worms, **78**, 51; Spanish missionaries in, **78**, 25; steamer service, **78**, 47; towns, **78**, 9; trade, **78**, 66; tribes, **78**, 7-8; Trinh family in power, **78**, 14; united to Annam, 1801, **78**, 16; upper, *see that title*; withdrawal of French troops from, **78**, 18.
- Tongking, Gulf of, fishing, **78**, 55.
- Tonle-sap, *see* Great Lake.
- Topas, Pondicherry, **77**, 4.
- Tortoise shell, **77**, 38.
- Tourane, **78**, 9; bank, **78**, 71; cable connections, **78**, 47; capture of town by Franco-Spanish fleet, 1858, **78**, 15; ceded to France by treaty of 1787, **78**, 14-5; coastal service, **78**, 47; harbour, **78**, 45; market, **78**, 61; port, **78**, 9; railway, **78**, 38, project, **78**, 39; tramways, **78**, 40; United Chamber of Commerce and Agriculture at, **78**, 62; viaducts, **78**, 39; wireless station, **78**, 47.
- Tourane river, **78**, 45, 56.
- Toys, **77**, 38.
- Tramways, French Indo-China, **78**, 39-40.
- Tran-ninh plateau, **78**, 3.
- Trang-ga, zinc, **78**, 57.
- Tranquebar, **77**, 1.
- Trees, **78**, 19, **79**, 34.
- Trinh family in Tongking, power, **78**, 14.
- Trucial Oman, **76**, 3, 4, 5-6, 6, 10, 11, **76**; *see also* **76** Contents; coast, **76**, 7; emigration, **76**, 35; fertility, **76**, 6-7; foreign intrigues in, **76**, 44; history, &c., **76**, 43-5; population, **76**, 30; Sheiks of, agreements with Great Britain, 1892, 1902, **76**, 44-5, 45, 68, position of, **76**, 72, relations with Great Britain, **76**, 46; trade, **76**, 21, 36.
- Tsêng, Marquis, information *re* China's non-acceptance of treaty of 1874, **78**, 18.
- Tsinshan, road, **81**, 18; telegraph office, **81**, 16.

- Tso-kiang river, **78**, 42, 43; traffic, **78**, 42-3.
- Tu-duc, King of Cochin China, **78**, 19; reign, **78**, 15; revolt against, in Tongking, **78**, 15; treaty with France and Spain, 1862, **78**, 15.
- Tuberculosis, **79**, 7.
- Tui-mien Shan, *see* Lappa.
- Tungsten, **78**, 56-7.
- Turkey, agreements with Great Britain, 1913, **76**, 47, 53; boundary between Persia and, **76**, 54; claims, to sovereignty over Arabia, 1874, **76**, 46, to sovereignty over El-Katr, **76**, 46, renounced by Convention of 1913, **76**, 47, to Mohammara, **76**, 55; construction of fortifications, 1886, opposition to and suspension, **76**, 54; designs in Koweit, **76**, 52; expeditions, to Hasa under Midhat Pasha, 1871, **76**, 44, effect on situation in El-Katr, **76**, 46, against Kaab tribes in Arabistan, **76**, 55; garrison established at Doha (El-Bidaa), 1874, **76**, 46; interests and influence, in Arabian coastal region, **76**, 28, in Bahrein, **76**, 47, 48, in Irak, **76**, 53-4, in Koweit, **76**, 52-3, in Persian Gulf, **76**, 70, in Trucial Oman, **76**, 44; negotiations with Great Britain, 1912-4, *re* affairs in Persian Gulf, **76**, 70; occupation of Hasa, **76**, 50; officials in Koweit, trouble with British, **76**, 52; quarantine in, **76**, 28; relations with Germany, **76**, 67; telegraph lines, Persian Gulf region, **76**, 54; war with, **76**, 76.
- Turkish blood, Persian littoral, **76**, 35.
- Turks, capture and plunder of Mohammara, 1837, **76**, 55; expulsion from shores of Persian Gulf, **76**, 75.
- Tuyen-kwang, **78**, 34; zinc, **78**, 57.
- Typhoons, **81**, 3.
- U
- Ubon, **78**, 36, 44.
- Ugeum, **79**, 26.
- Umm al-Kawein, Sheikh, **76**, 43, 80, 81.
- Umm Kasr, Turkish military post established at, 1902, **76**, 53.
- United States of America, agreement with Muscat, 1833, **76**, 41; financial crisis, 1907, **77**, 45-6; shipping, **78**, 46; trade, **77**, 49, **78**, 64, 65.

Upper Branch (Tien-kang) river, **78**, 36-7.

Upper Burma, tribes from, **78**, 7.

Upper Kwei-chow, tribe from, **78**, 8.

Upper Laos, **78**, 2, 5, 10; agriculture, **78**, 50; mountains, **78**, 3; path, **78**, 43.

Upper Tongking, stock rearing, **78**, 51.

Upper Yun-nan, tribe from, **78**, 8.

Usgão, **79**, 26; road, **79**, 24.

Utubi Arabs, conquest of Bahrein, 1783, **76**, 45, 47; Persian Gulf region, **76**, 52.

## V.

Vagchora, road needed, **79**, 25.

Vaiko river, **78**, 5, 37.

Vaisya tribe, Portuguese India, **79**, 16; Yanaon, **77**, 8.

Valentia, Lord, on prosperity of Pondicherry, **77**, 14.

Valudavour, road, **77**, 21.

Vanilla, cultivation, **77**, 33; export duty, **78**, 65.

Vandsa, road needed, **79**, 25.

Vapi, road, **79**, 25.

Varacunda, road, **79**, 25.

Vasco de Gama, railway station, **79**, 27.

Vegetables, cultivation, **77**, 31, 32, **78**, 51; oil, **78**, 50; products, import, **77**, 49; trade, **78**, 61.

Velim, road, **79**, 24.

Vemassa, road, **80**, 11.

Veniaga island, **81**, 8.

Venilale, road, **80**, 11.

Ventano, anchorage, **80**, 13.

Versailles, treaty concluded at, 1787, *re* French assistance for Cochin China, **78**, 14-5.

Vetches, **77**, 31.

Vettar river, **77**, 6.

Victoria, **80**, 6.

Vien-tiane, **78**, 5; copper, **78**, 57; *re*, 62; population, **78**, 57.

Vietry, **78**, 5, 34.

Village communities, Portuguese India, **79**, 20-3.

Villenour, **77**, 1, 22; canal, made 1828-9, description, **77**, 22; population, **77**, 5; roads, **77**, 21, 30.

Villupuram, railway, **77**, 22.

Vines, **76**, 19.

Vinh, market, **78**, 61; railway, **78**, 38.

Vinh-long, market, **78**, 62; population, **78**, 10; projected railway, **78**, 38.

Viqueque, schools, **80**, 10.

Volvota river, **79**, 26.

## W.

Wadi el-Miya, depression, **76**, 6.

Wahabi Emir, power of Beni Khalid Sheikhs broken by, 1795, in Hasa, **76**, 48-9.

Wahabi tribe, aggression in Bahrein, **76**, 47, 50; in Arabia, piracy, **76**, 44; conquest of Hasa province, 1795, **76**, 49; declaration signed by envoy, 1866, *re* British subjects in territories under their authority, **76**, 50; garrisons in Bahrein, expulsion, 1811, **76**, 47; growth of power, and conquests of, **76**, 48-9; influence in Hasa province, **76**, 49-50; intrigues in El Katr, 19th century, **76**, 46; Koweit, **76**, 52; Muscat, raids against, **76**, 41; Oman, **76**, 73; Persian Gulf region, **76**, 71.

Wahabism, foundation of sect, 1742, by Abdul Wahab (or son), **76**, 48-9.

Wallut, port, harbour, **78**, 56.

Wanchai, plague hospital, **81**, 3.

Wang-nam, *see* Fai-fo.

Warba Island, **76**, 53 note.

Water power, **78**, 59.

Watson, Admiral, capture of Chandernagor, **77**, 13.

Wax, export, **80**, 17, duty, **80**, 24.

Weaving, **78**, 57-8, 58, **79**, 42, 43.

Wellesley, Lord, refusal to hand over French possessions in India, **77**, 14 note.

West of India Portuguese Railway, **79**, 11, 28-9.

West river, *see* Si-kiang.

Wheat, **79**, 37.

White ants, **77**, 32.

White pepper, **77**, 31.

White Town, area, **77**, 5.

Wines and spirits, **77**, 31; duties, **77**, 37, **80**, 23; import, **77**, 48, 49, **78**, 64, **79**, 30, 46, **80**, 22, **81**, 21; tariffs, **80**, 23; trade, **77**, 47, **78**, 61.

Wireless communication, **76**, 68-9;  
French Indo-China, **78**, 47; Macao,  
**81**, 18; Persian Gulf region, **76**,  
54.

Wonckhaus, Messrs., establishment  
in Persian Gulf region, **76**, 67.

Wongkam, **81**, 1; northern part  
claimed by Portugal, **81**, 11.

Woods and wooden manufactures,  
**78**, 54, 58; trade, **78**, 61.

## X.

Xavier, St. Francis, **79**, 14 note;  
shrine, **79**, 10.

## Y.

Yamani tribe, Arabian coastal  
region, **76**, 29; Oman, **76**, 72.

Yams, **79**, 37.

Yanaon, **77**, 1; acquired by France,  
1750-2, **77**, 13; administration,  
**77**, 18-9; area, **77**, 2; enclave,  
description, **77**, 7; laid waste by  
hurricane and inundation from  
sea, 1837, **77**, 14-5; market, **77**,  
39; population, **77**, 1 note;  
roads, **77**, 21; schools, **77**, 20.

Yangtse, the, projected railway, **78**,  
42.

Yen-bai, **78**, 4, 33, 34.

Yen-the, iron ore, **78**, 56.

Yezd, caravan and trade routes,  
**76**, 20, 21, 23.

Yokohama, steamer service, **78**, 46;  
trade, **80**, 14.

Yougdea, *see* Jugdea.

Yun-nan province, **78**, 1, 4, 5,  
16, 18, 29, 30, 33; lines of  
communication, **78**, 42, 43-4;  
mountains, **78**, 2; port, trade,  
**78**, 66; section, bridges, **78**, 39;  
trade, **78**, 63, 64, 65; tribes from,  
**78**, 7; upper, *see that title*.

Yun-nan-fu, **78**, 44; railways, **78**,  
38, 43, projected extension, **78**,  
38, 42; road, **78**, 43.

## Z.

Zabara, **76**, 45; hostile fleet cap-  
tured and destroyed by British  
naval forces, 1905, **76**, 48.

Zaid bin Syf, **76**, 80.

Zanzibar under power of Sultan of  
Muscat, till 1794, **76**, 40; inde-  
pendence recognised from Muscat,  
but annual subsidy levied, **76**, 41;  
Sultan, agreement with Great  
Britain, 1873, *re* payment of  
subsidy to Muscat, **76**, 41.

Zebu bull, **78**, 51; horns, **77**, 38.

Zephyr fabric, export, **77**, 38.

Zinc, **78**, 57; export, **78**, 63.

Zobeir, Khor, **76**, 3, 12, 54; system,  
**76**, 13.

Zuari river, *see* Juari.

Zyar, **76**, 80.



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